

AUT asks Government for vote of confidence

by David Walker

The Association of University Teachers this week urged the Government to give a renewed vote of confidence in the universities.

A memorandum to Mr Fowler, Minister of State for Higher Education, criticised the Government for showering praise on "as yet untried institutions of further and higher education" while failing to finance universities and lecturers adequately.

"Emancipated universities cannot long provide intellectual excellence, and without intellectual excellence a sadly impoverished society will not easily recover", it said.

The AUT asked the Committee of Vice-Chancellors and Principals in its submission to the Government last December, emphasizing the positive contribution of the universities in both teaching and research.

It reported that universities turned out 60,000 graduates a year more than half of whom were qualified in medicine, science and technology, and at least a quarter in practical social science.

"The research contribution of universities is also remarkable. Most of the important breakthroughs in medical treatment, energy exploitation and social engineering have been based on university research, both fundamental and applied. British industry, for example, earned last year some £40m from exploiting the patents and inventions of university staff", the memorandum claimed.

The AUT said there were clear priorities for Government policy if

the universities were to stay a rich source of highly skilled manpower and practical research. There had to be continued recruitment, reasonable promotion prospects and maintenance of the system of tenure.

The AUT said three points were crucial to the continuing success of universities:

- an overall staff-student ratio of one to eight;
- the right mix of teaching and research—with one in five students a postgraduate; a third of every academic's time to be spent on research; and support funds built in by the University Grants Committee;
- supplementation for inflation.

The AUT admitted there was room for economies, but not for what it called thoughtless short-term cutbacks. It strongly urged the Government to think not in terms of financial cuts as in the past but in terms of genuine economies which may demand a little extra spending in the meantime.

"A gradual programme of building insulation, or creating an area improvement, would in the long run save many more times the amount spent in the short run."

On a long-term basis the AUT would like to see thought given to "the possibility of transferring funds from other areas of public expenditure in view of the contributions currently made by the universities in such fields as overseas development and young people's housing, health and careers".

The AUT declared its opposition to schemes for regionalizing higher education because of its administrative cost.

Mr Fowler is understood to be meeting AUT representatives soon to discuss the memorandum.

Commission to inquire into scarcity of women academics

The Equal Opportunities Commission has been asked to investigate why so few British women become successful academics.

Mr Laurie Sapper, general secretary of the Association of University Teachers this week told the commission that while a quarter of graduates were women they made up only a tenth of university teachers. He argued there was a strong case for further action of the commission based on the statistics.

Very few women university teachers are promoted to senior grades. Of 3,303 professors only 60 were women. There was only one female vice-chancellor, at Cambridge, and she was chosen on a rotation basis under which heads of colleges were appointed for a limited time.

Mr Sapper said: "I would like the commission to investigate why women do not become vice-chancellors or principals of universities, bearing in mind that these posts often go to prominent people in commerce and industry. I would like the commission to find out how many women have been considered for vacancies in the last two to three years."

The AUT itself is to carry out a study of why women lecturers' pay was usually £400 a year, or two points, below that of men.

Now the pips really are squeaking

from page 1

As predicted by *The Times*, the new White Paper does not give separate figures for the universities, further education and teacher training after 1975-76. It is thought no decision on the short-term cuts has yet been made, but it is likely the universities will suffer most from the cuts.

Last year's White Paper gave no figures for teacher numbers but in March 1975, a Department of Education report suggested the teaching force would be about 380,000 by 1978. This week's White Paper says teacher numbers will only be allowed to rise to 464,000 in 1977-78 and they will be held at that figure throughout 1978-79.

The 16,000 cut in projected teacher numbers will still enable staffing standards to be maintained at their present level but by 1979 roughly 15,000 teachers, or three per cent, will be unable to find school posts.

The expansion of in-service training and the introduction of induction training for new teachers is to be put off until 1977-78. By then the falling birthrate will make it

possible to give further training without harming staffing standards. The falling birthrate will also help to cushion the under fives against the cuts. The number of under fives receiving nursery education is to be frozen at the 1975-77 level of 488,000.

Mr Sapper said: "The under fives mean that by 1980 there will be nursery places for over four-fifths of the target set by the Government in 1972. Current spending on the under fives will go up from £135m in 1975-76 to £155m in 1978-79."

Student numbers on which spending is based.

1975-76 1976-77 1977-78 1978-79 1979-80

Schools: 418 429 439 449 459

Under-fives: 488 488 488 488 488

Primary pupils: 5,363 5,363 5,363 5,363 5,363

Secondary pupils to age 16: 3,246 3,246 3,246 3,246 3,246

Over 16: 2,991 2,991 2,991 2,991 2,991

Non-advanced further education: 312 312 312 312 312

Higher education: 512 512 512 512 512

Squeeze hits German universities

from Alan Cane

BONN

West German universities and science organisations have been hit badly by the economic squeeze. They are suffering, and will continue to suffer, unprecedented stringency as Federal and local government departments struggle to contain public expenditure.

The effects of these economies are as marked here, in the richest country in Western Europe, as in Britain.

Staff-student ratios and academic working conditions must worsen as a result of Government decisions to halt university expansion without limiting student intake. Dr Eberhard Böning, director at the Federal Ministry of Education and Science (a position roughly equivalent to a British under-secretary of state) told me that the Government had decided to limit institutions of higher education to 850,000 student places by 1985. He expected, however, that numbers would grow from the present 730,000 to about 1.2 million in the mid-1980s.

Dr Böning said shortage of money made it difficult to increase places—although the Government felt it had a moral duty to fulfil the expectations of its young people—perhaps 100,000 potential students would not get to university in the 1980s if numbers were limited.

Other effects are more immediate. At Hamburg University, with almost 30,000 students in arts, science and medicine, over 100 academic posts are frozen while at Bochum University on the Ruhr three tower blocks for teaching pre-clinical medicine have been built but only one is equipped and furnished.

The teaching is planned at Bochum has not yet started and it is not known when money will be available. At present clinical students have to go to Essen, Bochum was planned for 18,000 students; with only 75 per cent of the building in use, its population now is 23,000.

Research has fared no better. The German research society (*Deutsche Forschungsgemeinschaft*), roughly equivalent to the British Science Research Council, is in financial straits for the first time with a projected budget increase of only 1 per cent for the coming year, equivalent to a real decline of about 5 per cent.

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Mr Fowler gives little away on overseas students fees

by Alan Wood

Mr Fowler, Minister of State for Higher Education, was unforthcoming over future fees for overseas students when he replied in the Commons this week to a short debate on the subject.

Mr Anthony Kershaw, Conservative MP for Stroud, and a former junior minister at the Foreign and Commonwealth Office, pointed out that Britain already discriminated to a certain degree against overseas students by requiring them to pay higher fees. He had heard there was some bitterness in universities against overseas students but he had never met anyone who had been kept out of university by them.

Mr Fowler said he hoped there was no bitterness in universities. The number of overseas students had shown a dramatic increase in recent years and some colleges were

heavily reliant on them in certain special areas.

The percentage of university students who came from overseas was 11.5, much higher than in the past. The fact that they wanted to come to the UK was a cause for pride rather than resentment. It was admirable and worthwhile and the problem was how many places to provide.

Last year over 60,000 overseas students were in this country and were of the order of £110m net, or short of a figure of £200m per student.

There was a substantial proportion of postgraduates among them and the overseas student population was weighted towards science, technology and medicine where costs were high. That was a particular explanation of the high cost. He hoped that where cases of genuine hardship arose LAAS and universities would exercise a degree of discretion. There had been differential fees for many years.

He questioned the validity of the Government's forward projections. "The restriction to 600,000 students by 1981 will, in our assessment, fall short of the demand for higher education by 15-20 per cent. Our projections show the need for at least 360,000 places in the university sector alone."

"The Government does not seem to have allowed for growing numbers of women wanting higher education, the effect of raising the school leaving age and the fact that the 18-year-old population will rise steadily until the 1980s."

The Committee of Vice-Chancellors and Principals would not comment until the figures for the universities were known but the Committee of Directors of Polytechnics emphasized new pressures on the polytechnics. "In the light of the circumstances stated in the White Paper it is essential that higher education is organized and managed in a way that ensures the efficient and equitable use of resources," they said.

"The need for a national body to establish an efficient system of management, as recently proposed by the CDP is now more urgent than ever."

Mr Tom Driver, general secretary of NATFHE, said: "The White Paper, which is flying in the face of the Social Contract, will have a devastating effect on further and higher education."

NATFHE feels that it changes government policy in two areas from the original Framework for Expansion paper in 1972. It has proposed reduced teacher training and a degree and sandwich students and cut-back against teacher training opportunities, which is bound to affect our members."

The Association of Polytechnic Teachers is pressing for a meeting with Mr Mallett, Secretary of State for Education and Science, to discuss the cuts.

Mr Charles Clarke, president of the National Union of Students, said the cuts meant fewer students, fewer teachers, no nurseries and lower student grants.

The NUS plans a national demonstration today and a strike in colleges of education and further education.

Scientists this week emphasized how disappointing the settlement was for all those in "big science". They believed that the new enthusiasm for applied science among politicians and administrators was misguided.

Assuming the continuation of the present university proportion of all

of their income directly from the state.

Between 1972 and 1973, the latest date for which figures are available, the universities' research grant and income fell. Manchester University's research money dropped from 15 to 8 per cent of its total income. At Oxford and Sussex, where nearly a fifth of the money comes from research, the figure either fell slightly or stayed the same.

The proportion of women students in 1973-74 was nearly 32 per cent, compared with just over 26 per cent about 10 years ago. The number of part-time students in 1973-74 was nearly 50,000, but there technology got at least 94 per cent

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WUS calls for study funds

More than 75 per cent of the 53,164 overseas students in Britain come from developing countries, according to figures released by World Council Overseas Students Fees Aid Service to aid students from the poorest countries.

The agency says that if the Government intends to increase overseas fees by 30 per cent, additional funds should be given to the British Council Overseas Students Fees Aid Service to aid students from the poorest countries.

It also calls for a new scheme similar to OSFAS to be established by the Government and for allocating fees in advance to students before they enter Britain.

"Many poorer overseas students are here as a result of a considerable sacrifice being made over a long period by their relatives and friends."

"Low cash incomes in the Third World often make it no easy task for them to save even the £30 airfare, apart from the cost of food and maintenance."

"Some idea of the present hardship being faced by overseas students can be found in the 750 written applications for assistance in the United Kingdom that the WUS received in 1975, and in the 2,000 students who were asked in 1973-74 through the British Council OSFAS scheme."

The WUS wants that the increase in 1977 to £250 led to student reduction in polytechnic and colleges of between 5,000 and 7,000 in the following three or four years.

"Similar predictions could be made if there were further major tuition increases in fees as only the affluent students will be able to come here."

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Unions hostile and indignant after White Paper onslaught

by staff reporters

Education unions reacted with indignation and hostility this week to the education cuts outlined in last week's Expenditure White Paper.

University academics and research scientists, while disappointed, generally accepted the cuts as inevitable. Mr Laurie Sapper, general secretary of the Association of University Teachers, emphasized that much would depend on division of funds between the universities and polytechnics.

He questioned the validity of the Government's forward projections. "The restriction to 600,000 students by 1981 will, in our assessment, fall short of the demand for higher education by 15-20 per cent. Our projections show the need for at least 360,000 places in the university sector alone."

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PETER, PAUL AND DENIS

Staff: student ratio will inevitably become worse

Special White Paper analysis by John Fleiden

The implications in the White Paper for university budgetary policies are clear. Vacancy freezes and thorough reviews of existing courses will become immovable and regular features. Serious attempts will also have to be made to promote academic areas where expansion can be achieved at low marginal cost.

In departments where vacancies are unlikely to be filled the frequency of tutorials and group-size, teaching methods, or the personal research time of staff. The trend to temporary appointments is unlikely to abate as universities strive to retain flexibility.

The overall target for the number of full-time and sandwich students in higher education in 1981 has been reduced by 6.25 per cent, but details of how the cuts affect universities are still known only to the Department of Education and Science and the University Grants Committee.

What do these two policy changes mean to individual universities? Clearly the scope for minor one-

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DES pays 80% of universities' costs

by David Walker

Universities are looking increasingly like unutilized industries in the way they are financed. A greater proportion of their income, nearly 80 per cent, now comes from a single source—the Department of Education and Science. These conclusions come from the University Grants Committee's annual review of statistics, published on Tuesday.

Between 1970 and 1973, expenditure grants as a proportion of universities' income increased from 73 to 77 per cent. For some individual institutions the figure is nearly as high as 90 per cent. Most of the former colleges of education got at least 94 per cent

of their income directly from the state.

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Further college closures threatened

by David Hencke

The number of colleges of education to be closed may be doubled from 13 to 2

£1m college for disabled fails to draw students

by Jane Headley
A college for the physically disabled in Birmingham, which opened last August, has not attracted the numbers of students it was intended to draw.

Urgent discussions concerning the future of the college, Prospect Hall, part of the Selly Oak Federation of Colleges in Birmingham, are now taking place and charities have already been invited to make use of the facilities.

The £500,000 college was purpose-built to cater for 38 adult handicapped students on non-vocational, short residential courses. Half the cost was met by the Carnegie United Kingdom Trust and the rest was raised by a public appeal.

Last September a series of short courses had to be cancelled through lack of support, and since then the college has failed to attract a sufficient number of students to make it viable. The Reverend Paul Clifford, president of the Selly Oak Colleges, believes this is due mainly to education cuts in local authority spending, especially on courses of an adult, non-vocational nature.

The Rev Clifford said that as a result of the present economic climate students were unable to obtain local authority grants and it has not been economically viable to run courses.

The cost per student has been estimated at £10 a day (about £110 a student for an average length course). Non-vocational courses would have included literature, music and natural history of homes and gardens.

The lack of support has already resulted in about a dozen members of the college's staff being made redundant. Mr Stephen Lloyd, chairman of the governing body, said no assurances can be given at this stage about the futures of the three remaining members of staff, including the principal.

But there was no question of the college being forced to close, the Reverend Clifford said. "This is the only college of its kind and it is disappointing that the continuing programme which was originally planned has run into difficulties. The matter is under very active discussion both by the governors and the council of the college as to how the college can be operated on an assured, solid, financial basis."

Instead of running its own courses the college may now be used by charities involved with the physically disabled to run their own courses and conferences. Since it opened, the college has on occasions been used by outside groups for this purpose.

After a meeting of the Prospect Hall Council in London last week, Baroness Elliot of Harwood, president and chairman of the council, said charities were now being contacted and invited to use the college, and the building should be in use by the summer.

Sit-in over NUS Soviet line

The international policy of the National Union of Students and its relationship with the Soviet Union is now certain to come under fire at its Easter conference after an occupation of the London headquarters by "moderate" students.

Last Friday about 15 students belonging to Students for Representative Policies, a small radical group, occupied the union's switchboard, publications and vacation work departments.

Their seven hour occupation was prompted by the distribution of a 35-page report of the proceedings of a European summit attended by 21 unions, including NUS, at Bournemouth in December.

SRP says that the 15-page NUS communiqué included in the report is "pro-Soviet" and they accuse Mr

'Use staff pay savings for visiting dons'

A special fund to attract visiting scholars to Bristol University should be set up, Sir Alec Morrison, the vice-chancellor, has proposed. The money for the fund would come from savings on academic staff salaries.

Sir Alec also proposed a new "resources" committee to oversee the distribution of money in the university.

These moves should be made, Sir Alec has argued in a discussion paper presented to the senate recently, as solutions to problems of the "quasi-stationary" university. He suggested new mechanisms were needed to guard against conservatism and inertia.

He added: "While we want to introduce flexibility and change we must be aware of the future, not do we want to give the appearance that a great deal of change is possible where it is not."

The first step was to break down the university's spending. The staff share went on academic staff salaries, 44 per cent; non-academic staff took 26 per cent; 9 per cent went on "wholly uncontractual commitments" such as the rates, and 21 per cent was flexible to some extent, and included heating, departmental budgets and so on.

Reducing the academic staff budget by 1 per cent would provide a sizeable fund (variable each year, to be used to attract visiting scholars).

A special resources committee in addition to the existing administration committee was needed to "make the money run smoothly". Its members should be chosen so that they did not fight for sectional interests.

The proposals were warmly received at the February meeting of senate. Sir Alec emphasized that the resources committee should not interfere with the work of existing committees and that it should report to both council and senate.

On the visiting scholars fund Sir Alec said it would be most profitable if Bristol could attract scholars who would contribute to the university's work. "It is not looking for people who could talk to the university as a whole."

OU should be 'responsible for proposed teaching scheme'

by Frances Hill
The Open University should take responsibility for devising a national scheme of continuing education in collaboration with local agencies, Mr Norman Woods, regional director of the Open University for the East of England, said at a meeting of the Association for Recurrent Education on Saturday.

An impetus was needed from one institution which "can act as a catalyst and provide the innovative framework for developing a new style of adult learning," Mr Woods said. The Open University was likely to be in a position to devise collaborative schemes for continuing education before regional or national development councils could come into being.

"With suitable recommendations from the Venables Committee and with their acceptance by the senate and council, the university could begin a new developmental work from 1977 and move towards full development in its triennium 1980-82."

The Open University could set up a framework for the production and management of materials, course management, the control of certification and guidelines for the transferability of credits, Mr Woods suggested.

The use of centrally produced learning materials would offer the means of producing new ideas "which would attract a growing number of participants into continuing education". The materials should be designed for flexible use to suit particular local interests, social conditions, or economic conditions. Some new types of study could be introduced but "much good could also be done to widen the appeal or perceived usefulness" of many traditional study areas.

An Open University scheme of accreditation in continuing education could allow a "good measure" of freedom to local agencies in the management of their courses, Mr Woods said. Credits could be given for "serious endeavour" rather than "measured achievement, allowing colleges to dispense with examinations and continuous assessment. By this means adults weary of formal education might be encouraged to take courses which could then prove a "stepping stone" to the more advanced education.

Extra year for Olympic hopefuls in Bath gold plug

Bath University could be training future Olympic gold medalists for Britain if a new scheme to award sports scholarships is successful.

Bath plans to recruit sportsmen and sportswomen of international or Olympic standard who also have the required academic qualifications for a university course and give them an extra year to obtain their degrees.

The university will insist that the sports scholars maintain a satisfactory academic record throughout what will be four years for those on a conventional degree course and five for those on sandwich courses.

The suggestion for arranging the scholarships came from Mr Howell, the Minister for Sport, when he opened Bath University's sports hall two years ago. The extra year of studies will be underwritten by industrial sponsors who will also pay for specialist national coaches, travel and special clothing.

Honorary degree for THES editor

Mr Brian MacArthur, editor of *The Times Higher Education Supplement*, has been awarded an honorary degree by the Open University for his services to educational journalism. He is believed to be the first working educational journalist to receive an honorary degree from a British university.

Honorary degrees have also been awarded to Lord Bullock, historian and former vice-chancellor of Oxford University, Mr Raymond Mander, director of the General of Unesco, and 13 other men and women.

All the degrees have gone to people working in education, with exception of George Mackay Brown, the Scottish novelist and poet, who has used *Orcadian* and *Norfolk* in his writing.

ILEA head puts case for cutting overseas numbers

by David Walker
A 60-strong demonstration last week has not deterred the Inner London Education Authority from going ahead with its controversial scheme to reduce to 10 per cent the numbers of overseas students in London colleges.

Sir Ashley Bramall, leader of the ILEA, told its further and higher education sub-committee that the average proportion of overseas students had to be reduced to 10 per cent over a six-year period in order to provide for the people of London.

The ILEA has now to consult heads of further education colleges and polytechnics about the scheme, which is the best way to reduce overseas student numbers. For the present total numbers are to be frozen.

Mr J. S. Bevan, senior assistant education officer, reported that the proportion of overseas students had risen from 20 per cent in 1973 to 25 per cent last November, a total of 8,395.

In the debate Sir Ashley said the ILEA had to show the Government its clear intention of not providing education that was financed out of overseas aid funds.

Mrs Diana Geddes, Conservative, predicted that the decision would cause much concern and unhappiness among staff, many of whom might lose their jobs. She was particularly concerned about the staff of South West London further education college where over 80 per cent of the students were from overseas.

Dr Eric Brilant, ILEA education officer, has emphasized in a consultative paper that the 10 per cent figure was an average and would not preclude special arrangements being made for the small specialist colleges.

The ILEA decision was wrong because it had not thought the time through, Mr Anthony Kershaw, Conservative MP for Strand, last week told a packed meeting of students at the London School of Economics, called to protest at the Government's intentions towards overseas students.

Mr Kershaw alleged that the Government had done the sums wrong and underestimated the money spent by students' parents on fares, English books when they returned home, and living expenses. He said the Government had not thought of the money spent by the University Grants Committee.

He said: "I shall do everything in my power while I am still director of LSE to make sure overseas students are as welcome at LSE as they have been."

The cost of keeping overseas students was cancelled out by the foreign students they brought with them into Britain, Mr Norman John-Stevens, Opposition spokesman for education, told a meeting at the weekend. He was not opposed to a just increase in their fees but did oppose discrimination.

Worse staff: student ratio ahead

from page 1
off economies has long since past, and austerity must continue. Savings can now only be made by increasing the student-staff ratio.

Unless new posts in Ryanair, Sana's continue to be ending and some staff turnover or movement is obtained thereby, we shall be facing the spectre of redundancy in institutions as they survive.

The impact on the student staff ratio of a typical university can be best summarized in an example. Table I follows for five years the fortunes of a university in which the student-staff ratio is now 8.7. The figures for the base year are hypothetical but represent a possible present situation. Over the period the recurrent grant per annum and the student numbers rise by 3 per cent per annum.

One key assumption is that the proportion of the total income spent on academic staff salaries remains constant. The salaries budget, in other words, bears only its share of the total economies needed. This will never be the case since some parts of the budget cannot be cut at all; thus the increase in the student: staff ratio is understated.

Table I shows that the two policy decisions implicit in the White Paper increase the ratio by 6 per cent over a five year period to 9.2:1. In practice, however, the changes in the ratio will be far quicker and more dramatic than in Table I for three reasons:

● To leave a post unfilled is likely to continue to be the only substantial way of saving resources in the area of the university budget. Although the incidence of vacancies will be arbitrary, unplanned (and thus unfair), it represents almost the only chance of changing direction and funding new developments.

● The next five years are unlikely to see the disappearance of inflation. The Government will face this in

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TABLE I
Effect on a typical university's student staff ratio of increasing student numbers and lowering unit costs (at constant prices)

	Base Year	1	2	3	4	5
1. FTE student numbers	8,700	8,961	9,229	9,505	9,781	10,058
2. Recurrent grant per head	£1,638	1,621	1,605	1,589	1,573	1,557
3. Total grant (a)	£14,250m	14,526m	14,812m	15,103m	15,401m	15,702m
4. Departmental salaries (47%)	£6,700m	6,827m	6,962m	7,098m	7,238m	7,380m
5. Average salary cost	£6,700	6,700	6,700	6,700	6,700	6,700
6. Academic staff numbers (b)	1,000	1,019	1,038	1,059	1,080	1,101
7. Student staff ratio	8.7	8.8	8.9	9.0	9.1	9.2
Notes: (a) line 1 times line 2. (b) line 4 divided by line 5.						

TABLE II
Effect on a university's student staff ratio of non-compensation for inflation (at constant prices)

	1	2	3	4	5
8. Savings to be found from reduced salaries (c)	£ 136	139	142	145	148
9. Reduced sum for salaries (f)	£6,564m	6,587m	6,596m	6,593m	6,592m
10. Average salary cost (d)	£6,700	6,700	6,700	6,700	6,700
11. Revised staff numbers (e)	987	986	983	979	974
12. Student staff ratio II	9.1	9.1	9.2	9.2	9.3
Notes: (a) line 1 times line 2. (b) line 4 divided by line 5. (c) line 8 divided by line 5.					

TABLE III
Effect on a university's student staff ratio of incremental creep (estimated at 2% per annum) (at constant prices)

	1	2	3	4	5
13. Annual average salary cost (incorporating "creep") (g)	£6,775	6,850	6,925	7,000	7,075
14. Revised staff numbers (h)	987	996	1,004	1,013	1,022
15. Student staff ratio III	9.1	9.3	9.5	9.7	9.9
Notes: (a) line 1 times line 2. (b) line 4 divided by line 5. (c) line 9 divided by line 14.					

New maths centre

Brinford University is to establish a new Institute of Computational Mathematics in October, 1976.

The Institute will operate within the school of mathematical studies. It is intended that research and consultancy work in mathematics, statistics, operational research and computer science will enable it to be self-financing.

Social history

A new journal advocating the study of social history as a "new kind of history" went on sale last week. Edited from the department of economic and social history at Hull University the first issue of *Social History* concentrates on rural life and how social theory treated poverty in the nineteenth century.

Government blocks short vacation dole claims

by David Walker
The Government this week took steps to stop students claiming supplementary benefit during their short vacations.

Mr Mulley, Secretary for Education, announced that funds would be redistributed from next academic year so that the personal maintenance award at present £70 over 22 weeks of vacation, would only cover the eight weeks of Easter and Christmas.

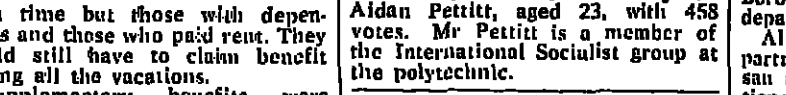
During the short vacations the new grant will provide on average the equivalent of single people not paying rent, which at present is £3.70.

Mr Mulley said: "It will no longer be necessary or appropriate for the majority of students to claim supplementary benefit in those vacation periods when they are unable to find vacation employment in the summer will continue to be able to claim supplementary benefit if they do not have enough income to support themselves."

Students will not now receive a contribution towards living expenses during the summer when, the Department of Education says, there are normally opportunities for students to find jobs.

Students' reactions to the changes were mixed. Mr Charles Clarke, president of the National Union of Students, welcomed the Government's assertion of the right of students to claim supplementary benefit. He said that the changes would be a bitter hardship and erosion of the welfare state which some people have been actively promoting.

He urged all students to continue claiming benefits during all vacations. He added that the Government's measures would not have the desired effect. The majority of claimants at present were not single students living at home outside



Charles Clarke

term time but those with dependants and those who paid rent. They would still have to claim benefit during all the vacations.

Supplementary benefits were assessed on assumed income rather than what a student actually received and Mr Clarke predicted that next Christmas thousands of students would appeal against official assessments of their income.

The DES move was announced at the same time as Mr Poor, Secretary for Employment, told the House of Commons that in future students would not appear in the country's unemployment statistics but would be counted separately.

He said that students entering and leaving the unemployed register at vacation time caused great fluctuations in the figures and distorted them. For instance, the Department of Employment reported that there were over 93,000 students registered as unemployed in August last year and just over 10,000 at the start of December.

Queen Mother opens new QMC building

The Queen Mother, Chancellor of London University, this week opened a new £1.5m biology building at Queen Mary College. After unveiling a plaque in the entrance hall, she toured the building and later, had tea with a group of students in the students' union.

The building is shared by the departments of plant biology, zoology and comparative physiology. Over the last year its intake has grown from 30 to 120.

65 year-old defeated

A 65-year-old student narrowly failed to be elected student union president at the polytechnic of North London this week. He polled 409 votes, but was beaten by Mr Aidan Pettit, aged 23, with 458 votes. Mr Pettit is a member of the International Socialist group at the polytechnic.

DES pays 80 per cent of university budgets

from page 1
was a noticeable trend between 1972 and 1973 for the big civics to increase this sector. Birmingham, Leeds, Manchester and Newcastle all registered such changes. However, the number of non-graduate students at Sussex increased by nearly 40 per cent.

In 1973, the numbers of teaching and research staff in the universities continued to rise, but the rate of increase—2.3 per cent—was down—dropped. The professoriate increased by nearly 2 per cent.

Statistics of Education 1973 Volume 6 Universities, University Grants Committee HMSO £6.50.

NELP row erupts again over right to reject students

A bitter row has again erupted between a London polytechnic director and a head of a department over the right to reject students nominated by one of the polytechnic's paymasters.

Dr George Brown, director of North-East London Polytechnic, has taken over the administrative responsibilities of Mr Eric Baker, head of the social work, health and nursing departments. This is a repeat of the dispute last October when was settled only after officers of the Central Council for Education and Training in Social Work and the Association of Teachers in Technical Institutions were brought in.

Dr Brown told Mr Baker last week that his "administrative freedom" was to be taken away because he had not notified him that two candidates for a social work training course nominated by the Borough of Newham Education department had been rejected.

All letters from Mr Baker's department have to be sent to Dr Brown and all resources recommendations have to be countersigned.

Mr Baker replied to Dr Brown: "I regret that I must courteously but firmly reiterate that I am not to be compelled by duress, however camouflaged, in consent to actions which I consider to be contrary to professional or common morality."

The dispute last year was over an attempt by Dr Brown to secure the admission of Newham candidates to a social work training course run by the department. One of them, an untrained education welfare officer for Newham, came forward for interview again last month, including an assistant director of social services and a senior probation officer as external assessors, decided the candidate was "unsuitable for social work". It accepted another Newham nominee only for the waiting list.

Mr James Palling, deputy director of education in Newham, commented this week that so far as he was concerned no final decision on the students' applications had been made.

In his letter last week Dr Brown said: "I am most perturbed that in view of the history and sensitivity of this issue you should have omitted to notify either myself or the deputy director of the position and I had to learn it from outside the polytechnic."

Mr Baker replied that he had kept the director informed about the progress of the students' applications.

European group to highlight teacher training problems

by David Hencke
Problems facing teacher training are to be highlighted in a new European organization, the Association for Teacher Education in Europe, to be established in Belgium next June.

The new organization, supported by the European Cultural Foundation, expects to attract colleges and individual members from 13 countries. Eight, the United Kingdom, Belgium, the Netherlands, Denmark, Germany, Italy, Sweden and France have played an active part in establishing the organization and another five, Portugal, Spain, Turkey, Norway and Ireland have taken an interest in its development.

The association will be formally established at the University of Liege between June 21 and 23.

Two colleges of education which face closure are making new efforts to keep open by becoming independent colleges attracting students from abroad.

Alnwick College of Education, a 30-student college in Northumberland, is cooperating with its local authority to see if it can attract enough students to remain independent.

Saffron Walden College of Education, a British and Foreign Schools Society college with 25 students, is also looking to see if it can develop courses for overseas students. Both colleges face closure in the summer of 1977.

Dr John Cane, principal of Loughborough College of Education, has been appointed the first principal of the West London Institute of Higher Education. The new college incorporates the country's oldest teacher training institution, the Borough Road College, founded in 1798, and Marie Grey College of Education. It includes advanced courses from Chiswick Polytechnic.

10 further closures

from page 1
Edge Hill, Ormskirk and Bulmersho, would be completely unaffected by further cuts.

Small university departments could also be asked to raise their graduate entry, although the department could not force this.

NEXT WEEK

Trends in English
Sir Harry Melville profile
Closure of SSRC survey unit
The National Theatre
Student fees
Academics and trade unions

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NT Your link...

with the new National Theatre on the South Bank
... the NT Schools Association

The National Theatre will, from 16 March, give the first public performances in its new home on the South Bank. Of the three theatres there the Lyttelton opens first. The Olivier and Cottesloe Theatres are to follow in early summer.

The NT Schools Association offers teachers regular information and priority ticket booking for all three theatres (as they open) as well as details of:

- * Educational packs for NT productions
- * NT talks and tours of the new building
- * Reduced price NT publications
- * Reduced price ticket schemes

Special offer: join now and receive 25% discount on normal membership fee for one year (£2.00 reduced to £1.50). Please complete form below and return with remittance as soon as possible.

To NT Schools Association, Box Office, National Theatre, South Bank SBL 9PX.
I wish to become a member of the NT Schools Association. THE 11/77

Name _____

School/College _____

Address _____

Education Authority _____

I enclose cheque/postal order (made payable to National Theatre) for £1.50

An ominous silence on the road to recovery

The White Paper is a most significant document (which is, perhaps, the justification of the 37 per cent increase in public expenditure since last year), not so much because of the precise numbers which it contains, but because of the philosophy on which it appears to be based.

This is not to say that the plans themselves are unimportant or that their effects will be unnoticed. However, compared with any previous statement by a Labour Government this document can at best be regarded as neutral in its attitude to the public sector. It is downright antipathetic. It refers to the ratio of public expenditure to national output as exceptionally high. It is made clear that future advance will depend on the rate of growth of output. Reference is made in several places to the "burden of taxation", and it is implied that no more can be taken from those with top incomes.

The emphasis on improving industrial productivity is even more strengthened with the intention of producing "a faster long-term growth of output". The growth in the extra output available in the next four years is to be assigned to the public sector, for research, investment, and private consumption.

The objective is not to allow "ever-growing expectations for better services to prevent more and more resources being required for higher and higher taxation". Here where it is suggested that the position which it is hoped to reach in 1979 is temporary, or to acknowledge that public expenditure was regarded by the supporters of the present government as a good thing. In this connection, it is worth quoting a key sentence from the beginning of the document: "Popular expectations for improved public services and welfare programmes have not been matched by the growth in output, or by willingness to forgo improvements in private living standards in favour of those programmes" (Para 1).

The last part of this sentence seems to me to be debatable if not downright wrong. I would have thought that the facts demonstrated that ordinary people were willing to accept more slowly rising consumption expenditures for the sake of health, education, and welfare, especially if the costs were shared fairly by their leaders.

Turning to more factual considerations, there can be no doubt that there are intended to be cuts, not only in the rate of increase in public expenditure but in its level. From now on the goods and services element of public expenditure is expected to fall as the transfer payments element excluding debt interest.

I am bound to say that I am also a little surprised by the size of the figures. According to my calculations, admittedly not yet completed, the projected interest is not compatible either with the scale of reduction of the borrowing required that the Chancellor appeared to envisage, or the diminution in the rate of inflation. But this is an extremely complicated technical matter and I could easily be mistaken.

Table 1 shows the rate of change of the volume of public expenditure excluding debt interest. The figures in brackets are estimates of what is actually supposed to have happened; the other figures are plans. From these figures some interesting conclusions emerge. Firstly, in the financial year just coming to an end, 1975-76, public expenditure is significantly higher than was planned. Thus, the cut next year will be from a higher base.

Secondly, it could be argued that all of this is very small beer. It could be said that the Government's favour that, as a result of these cuts, its overall economic strategy will succeed, and in the new economic world of the 1980s the social services will start to rise

Reactions to the public expenditure White Paper



Professor Maurice Peston



Sir Norman Lindop



Mr Charles Carter

rapidly again, the whole business can be borne and will turn out to be worth while.

After all, if the whole contingency reserve is spent, there will not be a cut in 1977-78, and even in 1979 we shall be spending at a level higher than in 1974.

This, however, takes me back to my opening remarks on philosophy. They suggest that it is not a matter of short-term measures to meet a crisis, but of long-term permanent restraint on the relative (if not absolute) position of public expenditure.

What of education itself? The decline in its relative position is further accentuated. In 1974-75 its share of total expenditure by volume was 13.7 per cent. This is projected to fall to 13.1 per cent by 1979-80 (or 13.4 per cent if it is assumed to receive an average share of the contingency reserve). If we take 1973-74 as the last Tory year, the decline in expenditure is projected to be lower than that in 1979-80, a fact it shares with a number of areas, but not housing, health and personal social services, social security, or defence. To be set against this is the fact that it will remain the second largest area of expenditure even by the end of the decade.

Leaving out research councils and the arts, the comparison between last year's White Paper and this is in Table 2.

The position with respect to further and higher education is difficult to understand. The estimate for 1979-80 has been cut from 583,000 to 533,000 which is a larger reduction than the planning figure for 1981. The cut in numbers in higher education is difficult to understand. Thus, the estimate for 1979-80 is a larger reduction than the planning figure for 1981. The cut in numbers in higher education is difficult to understand. Thus, the estimate for 1979-80 is a larger reduction than the planning figure for 1981.

So far as current expenditure on higher and further education is concerned, this is still planned to grow, albeit at a slower rate than was suggested in last year's White Paper. The reduction is from 18.5 per cent to 7.5 per cent growth over the four years. But, interestingly enough, my estimates, admittedly rather crudely done, suggest that the only area of expenditure which would have been required to maintain 1974-75 real unit costs.

Thus, last year it appears we were planning to allow average costs to rise, and this year that improvement element has gone. It seems to me that if there are genuine economies of scale to be had, and if staff are reallocated to where they are needed, the higher and further sector should cope even with numbers higher than projected.

This leads me back to my opening comments. I am sure the education system can cope if people are convinced that the cuts will genuinely help our economic future, and that they will participate fully in the subsequent recovery. It is on this latter point that there is an ominous silence.

In addition, while it is right to argue that we now have an opportunity to shift resources where they are needed, and to influence many major reforms, the opportunity has to be taken and the reforms speedily brought about. Once again many of us are anxiously to hear what Ministers say and then do along those lines.

Maurice Peston

The author is professor of economics at Queen Mary College, London.

More questions raised than answered

After months of dire speculation and doom-laden prophecy we can be relieved it was no worse. Higher education is once again cut down to size—one paragraph of 12 lines in a White Paper of 149 pages and set in the context of the desperate scramble for priorities across the whole of our national life; who is to say that we have not received our due?

Yet that one paragraph raises more queries than it answers. At first reading it is blandly definitive—the 1981 target for full-time students in higher education is at least acknowledged to have slipped again, to 600,000; there will be "some increase in competition for entry", the proportion of the post-school age group going into higher education will rise from "about 14 per cent to about 15 per cent". There will have to be more effective use of resources (no additional staff after 1976-77) and capital will be severely restricted.

Then the doubts arise. The new target of 600,000, while it comes as no surprise, arrives without explanation or qualification; the four-year estimate of the White Paper itself stops short at 550,000 in 1979-80. The growth rate climbs laboriously from less than 1 per cent in this year's estimate to 3 per cent in 1981.

To reach the new target for 1981 it would have to rise to about 41 per cent in subsequent years; this is an easy assumption for the writers of the White Paper to make, but there is no commitment. I have more than a suspicion that they are expecting the figure to turn out to be more in line with Gareth

Williams's "lowest assumption" estimate (7725, February 13) of 550,000, or even 500,000.

The sharing-out of the total across the binary line is not attempted; since this document is all about money, and unit costs are not the same on both sides of the line, this is odd. Some figures must have been produced, but we are not told what they are.

Is the declared policy of the 1972 Education White Paper aiming at parity of members across the line by 1981 still intact, or has that gone with all the other brave hopes?

Should we not expect the balance to swing towards the civic sector, not only on the basis of costs, but also because it provides a broadly based system directly related to industry, business and the professions and intimately involved with the nation's economic health?

Is a rise of about one per cent over the next five years in the proportion of the post-school age group going on to full-time higher education a worthy objective for a highly developed industrial nation? Or does that bland phrase about "increase in competition for entry" really mean a return to the pre-Robbins situation, where the student's place in the course was determined by good students could not get full-time places?

No estimates of part-time members are attempted in this year's White Paper, although in terms of full-time equivalents they must account for at least 20,000 places at the present time: if full-time places become hard to get this demand could increase significantly.

Norman Lindop

The author is director of North's Polytechnic.

It could have been a lot worse

Public expenditure on goods and services is expected to be slightly higher in 1979-80 than in 1974-75. Hence, the picture which is painted in the White Paper is that "Healey's Slashing Cuts" have not been as drastic as they are estimated to be. Between those years, by less than 2 per cent, but this is because the school population is about to begin a substantial fall; the common-sense of the Union of Teachers was "catastrophic".

Higher and further education expenditure is estimated to increase from 1974 to 1979, by nearly 10 per cent; "staggering", said the Association of University Teachers, and "sell-out" cried the National Union of Students.

May we please have a little moderation and sanity, and indeed a little common honesty? There is nothing in the public expenditure White Paper which is, in the least, surprising. The Government has been committed for many months to hold public expenditure steady, and a White Paper which spells out how a government will meet its pledges is not a "document of shame" (the Tribune Group, this time).

It could have been a lot worse, and indeed there is a wretched opinion which says that it should have been a lot worse—that the country cannot support the present level of public expenditure, and that simply to prevent increases is not good enough.

There is no evidence that education has suffered cruel and unusual punishment, although some teachers are going to have to seek other jobs.

The numbers in higher education are projected to rise to 600,000 in 1979-80 and 600,000 in 1981. This assumes a small increase in the proportion of the relevant age groups entering higher education.

and lies at about the middle of the plausible estimates of numbers.

Putting the matter another way, there is no assurance—on the facts known—that we shall even reach 600,000, and we came at all for retelling the much higher figure previously assumed. There is no reason to believe that entry will become significantly more competitive than it is now.

My estimate is given for expenditure on higher education, but only for higher and further education taken together: non-advanced tertiary education is expected to grow rather more rapidly (probably reflecting growing provision for the 16-19 age group), so one can infer that the resources per student in higher education will fall.

This is stated in the form that "there will be little if any scope for increasing total staff numbers after 1976-77", which implies a deterioration of less than one point in the student-staff ratio.

Since, however, many polytechnics and teacher training colleges have, or will have, ratios which everyone recognizes to be far more generous than can be justified (and which they will be expected to correct), it is not yet necessary to assume that the universities will suffer badly. The standards in staff numbers is not yet threatened, and educational quality, which some have foreseen.

Thus far, therefore, I conclude that Mr Healey's tiger is made of paper. Nothing very terrible is going to happen, except the disappointment of some newly-trained teachers, who deserve compensation for suffering the results of the ineffectiveness of their Government.

In detail, there will be a lot of inconveniences and some adjustments.

Charles Carter

The author is vice-chancellor of Lancaster University.

Don's diary

Sunday

At one time I lived in a hostel where the housekeeper always did her Monday wash on Sunday evening because she could not face the idea of Monday with the washing still to do. My week also starts on Sunday; the reason is similar, but for me it is the preparation of the lectures and not the wash.

Sundays provide a patch of completely uninterrupted time in which to revise and sometimes (desperately) to rewrite lecture notes.

My arts colleagues seem able to write their lectures during term, not infrequently putting in the last words as they set off to lecture. When giving a course of mathematics lectures it is always advisable to know what will be in the last lecture before starting the first. I am usually written in the vacation—leaving Sundays as a day for disconcerting second thoughts.

Monday

I made a reasonably early start but even so it was a rush to get in to college in time for the first tutorial; the plumber arrived, while I was still eating breakfast, to investigate why there was a leak in the kitchen.

Monday morning at nine o'clock is not a very popular time with undergraduates (or me) for a tutorial but this morning's pair were hard-working and enthusiastic and looked neither sleepy nor hungry when they arrived. I certainly would not have suggested this time for a tutorial had there been any other possible hour but it is becoming increasingly difficult to find times in which to fit over a dozen tutorials each week.

With more and more options offered in the course, to discover a tutorial time for two undergraduates (who want to study the same subject and who have no lecture) is not only a task but a luck. Between five and seven in the evening is fairly easy because there are no undergraduate lectures then but that is when seminars are held.

When I arrived at Oxford first I was told undergraduates could not be asked for tutorials between two and five in the afternoon because they would wish to play games; I suspect very few of them do now but the university and college meetings have now taken over almost every afternoon for me.

Like most other Oxford dons, I have two employers: a college and the university. The college provides me with a study (with a superb view of Merton) and it is here that I give tutorials and spend the greatest part of my time. As a Mathematical Institute lecturer, I go to the Mathematical Institute to lecture and attend seminars but I have no room there.

Getting from St Hilda's to the Mathematical Institute by car is not quite as difficult as it was a few months ago (when it involved either completing a key round the science area and Mansfield Road or going three-quarters of the way round the city in order to get from north to north) but it is still liable to be a time-consuming journey; and even when one succeeds in getting to the Institute there is certainly no guarantee that there will be anywhere to put a car.

The only practical solution to the transport problem is a bicycle, which one can take short cuts through now almost entirely deserted Holywell or Queens Lane. Today it was wet and cold so that I was not encouraged to attempt it, and the architectural splendour of the Institute is not to be missed.

After the lecture I called in at the university offices, now established in new and impressive buildings in Little Clarendon Street. When the university administration was dispersed and scattered over the town in the Clarendon Building, the High Street and elsewhere, it seemed so much smaller; now it is a vast organization and so suddenly become a vast organization.

I am quite sure it is proper that the university should house its

administration in purpose-built offices with an obvious front door and a reception desk but for a while I shall continue to regret the move from the Clarendon Building where every outside door looked like a back door and finding a particular office presented a challenge for memory and initiative—especially if one got on the wrong staircase.

After lunch in college, my pure mathematics colleague and I talked to a young woman who might possibly be a candidate for the entrance examination next year. We did our best to describe the course of the tutorial system and sent her away with a college prospectus. As she left, a candidate belonging to this year's examination arrived and I started the explanation all over again.



Oxford traffic was a problem even in 1926.

Tuesday

Another nine-o'clock tutorial in college this morning was followed by a lecture at the Mathematical Institute. My lecture audience seemed fairly evenly divided between those who took no notes (and spotted all the mistakes I made on the blackboard) and those who were so busy writing that I rarely saw their faces.

A member of the faculty some years ago said women undergraduates were particularly anxious to copy down everything said and written in a lecture and he claimed that they had copied "good morning" when he wrote it on the board. But in my audience this morning, the note-takers certainly had a good many men amongst them.

Some time ago, mathematics undergraduates became very enthusiastic about the heading out of duplicated lecture notes. From my experience in another course of lectures, it is not at all clear that these notes were either useful or appreciated; they certainly took a great deal of time to prepare and were expensive to reproduce and undergraduates still made their own lengthy notes at the lectures.

In the afternoon I spent two and a half hours at a meeting in the university accommodation office resolving some of the difficulties which have arisen at a new graduate housing estate because of the eagerness of the accommodation committee to get tenants into the new houses as early as possible. The result was that graduates shared, for several months, a muddy site with builders, carpenters and bulldozers, and some of them were not too happy about it.

After the meeting there was barely time to dash back to college for a couple of tutorials from five to seven. The evening was spent most agreeably with friends.

Margaret E. Rayner

Wednesday

Wednesday morning is terrible this term with four first year tutorials in a row. This week by one o'clock my voice and right hand were both exhausted after trying to

explain how to integrate over volumes and surfaces. It was all made much more difficult because the undergraduates had so little geometrical intuition and some of them were even uncertain about the equation of an ellipse. It is (to me) a sad fact that undergraduates are so seldom able to find creative ideas in geometry and so infrequently illustrate their arguments by diagrams.

Wednesday afternoon almost always produces a college meeting. This afternoon it was an extra building committee which considered plans (still in a very early stage) which might involve altering the layout of existing buildings. In order to understand the suggestions more clearly, we went on an on-site inspection and some members of the committee became so fascinated to find store rooms and cupboards of whose existence they had been previously unaware that they could hardly be persuaded to leave the site and return to the committee room again.

At the end of the afternoon's discussion it was clear that there was still a considerable amount of work to be done (and I am sure more meetings to be held) before any decision could be made about the scheme as a whole so we restricted ourselves to modest recommendations about heating and ventilation.

In the evening, I joined a working supper. In general, I mistrust whening meals. They are liable to mean that the food is tepid and the discussion is confused. But this one was so splendidly organized as an informal supper with licence to talk shop that we ended up by quite clearly agreeing with each other.

The party meeting ended about 10 after which I came back to college to do two hours' preparation for the next day's tutorials. It is on occasions like this that I regret that I am no longer living in college.

Thursday

Today started off with three tutorials, one of those with first year physicists on integration over volumes and surfaces. On the whole, they seemed better at it than the first year mathematicians yesterday.

Over lunchtime, I drove to Leicester. It is usually a dreary journey, but today the air was clean and the sun shone, and even driving on the motorway was a pleasure. At Leicester, I formed part of an appealing committee for a national association concerned with the teaching of mathematics.

At the end of the interviews, I was most unexpectedly invited to the home of one of the other interviewers and given an excellent supper (which was a long way to make up for the fact that I had had very little lunch). On the strength of this pleasant evening, the journey back to Oxford seemed to take no time at all.

Friday

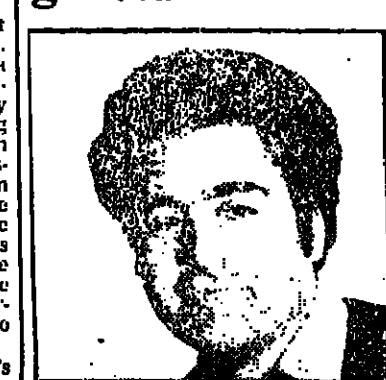
This morning and afternoon were devoted to two tutorials, including those which had been transferred from yesterday afternoon. Just for once, I broke my firm rule never to teach immediately after lunch. A friend, who is in another university, tells the story of the afternoon when she actually fell asleep while standing up giving a lecture between two and three, and I suspect I might do the same in a tutorial. However, on this afternoon, the undergraduate had so much to say that was interesting and unusual that there was no risk at all.

Last summer, I accepted an invitation to talk, on this evening to the local branch of the Mathematical Association; because of the long notice it seemed an excellent opportunity to gather together a few ideas on the teaching of mathematics to women—even if I was going to talk about it this week. It has been extremely interesting doing the work and the audience produced a number of very valuable new lines of thought which I must follow up—some time.

Margaret E. Rayner

Dr Rayner is a fellow of St Hilda's College and lecturer in mathematics at Oxford University.

All that's Oxbridge does not glitter



Ivor Crewe

According to New Society's reviewer of Frederic Raphael's television series *The Glittering Prizes* "both the doubts and the perversity interest in the series stem from the same phenomenon: the guilt that privileged people now feel at the opportunities they have had."

Perverse interest, judging from the common room on Thursday mornings, certainly; doubts perhaps; but guilt, no. Setting aside the excellence of the acting and scripting, my own explanation for the rapt attention paid to the plays is more cynical. As the columns of *The Times* regularly show, academics are not immune from collective narcissism or nostalgia, and successful Oxbridge media people can hardly be expected to ignore a Forsythe saga about successful Oxbridge media people.

My own twinges of irritation with the series arise from something less worthy than guilt at undeserved privilege. The Oxbridge portrayed in the plays, for all their flair for freshness, is a cliché; the standard media model of puns, May balls, and strawberries and cream in the college gardens. It is the Oxbridge socialists, civilised by his friends and enemies alike, the one unsold headmaster told me and my contemporaries of the mid-1960s to expect, but not the one we found, or necessarily wanted to find. As an alternative offer, my own selective and prejudiced guide to image and reality in Oxford.

Intellectual life, by reputation sparkling and/or highbrow, as made manifest at High Table or in student discussions continuing deep into the night. In reality, mediocre and sedulously although no more so than at any other university.

My two years of elevated dining taught me that the conversation was derived to a surprising degree from ribbits in the dry press, or amounted to more gossip. Of course, gossip has its style and standards and Oxbridge was rich in dons with Whitehall connections to provide inside information. In the Junior Common Room, the *Mirror*, and the *Express* had the highest circulation (for the sport) and it was stud poker that mainly went on into the early hours.

The beauty of the place: nobody has ever regarded the colleges and river as anything but beautiful. But whereas it might seem, the architecture and atmosphere could be intimidating.

For those without five years at boarding school, especially from the large industrial towns, the quads, the chapels, the ivy, the dining halls and worst of all the chapel bells—my God, those bells!—were not perfection and tranquillity, but suffocating and depressing. The medieval mosaic atmosphere was an invitation to an alien world and culture to which the establishment classes were born and the direct grant middle classes were not. It

took me a year to get used to it. The tutorial: the symbol and foundation of an Oxbridge education and generally accepted as an unrivalled means of learning. In novels and plays usually portrayed in one of three ways:

- tutor as eccentric. I can only report that to our disappointment I and my friends were never tutored on a train to Fuddington or invited to a tutorial before breakfast. Dons were punctual, polite and sober;
- tutor as brilliant wit. To our relief, ruper-like intellectual repartee was not the staple fare of our weekly meetings. The casual chat or quiet monologue might be a more apt description;
- tutor as wise old man of learning. For the fortunate few (including myself), chancing upon the right subject in the right college, the tutorial did allow one to listen and talk to scholars of true distinction. But most dons, like most university teachers elsewhere, were not men of outstanding intellect or learning.

And, anyway, to keep the system going, Oxbridge had to rely increasingly on postgraduate tutors. The individual weekly tutorial is the special strength of an Oxbridge education, but for reasons much more prosaic than usually acknowledged. Quite simply, as a way of getting students to write large quantities frequently and regularly, it cannot be bettered. The seminar group or class, typical of other universities, provide shelter for the lazy and unprepared. In regular face-to-face relationships failure in production cannot be fudged.

Student life: supposedly idyllic, if infinitely varied and possibly, in truth, dull, routine, limited and chaotic for the majority. Since facilities were better than anywhere else this reflected on us, not the university. As far as I could tell, most Oxbridge students were spectators, not players. Only minority belonged to the Oxford Union, most of them were smug and pretentious and wild horses would not have dragged them there.

The political clubs were largely run by self-seekers and, incidentally, were corrupt to the core, ballot rigging became a new art form. And the college balls (the scene of Raphael's second play) avoided by the majority, not out of radical principle, but for lack of money and girlfriends (socialists displayed their principles by sporting red bow ties).

Cross: despite blurring and overlap, the main social and cultural divide was not working class/middle class, but grammar school/public school. Only minority belonged to the Oxford Union, most of them were smug and pretentious and wild horses would not have dragged them there.

The public school leaver Oxbridge itself was the glittering prize, a three year bout of indulgence before one slipped into a reserved and comfortable job. The grammar school leaver was more hardheaded and utilitarian. Oxbridge was but one rung of many, of which the first was the 11+.

It was to be endured as much as enjoyed as a step towards what? Not glittering prizes, just prizes—the civil service, general practice, the solicitor's office, townships, headmasterships. Oxbridge was the place that gave you a head-start over the others. Otherwise it might as well have been called the University of the South Midlands.

The "new" universities have already undergone a similar process of myth-making, which it is probably too late to reverse. The main ingredients of the new university image form a neat counterpoint to those for Oxbridge. In place of ancient college and grassy quad the new brutalism and concrete plazas; in place of great social sciences as the core discipline; instead of a political young blade the student militant.

The imagery works because, as for Oxbridge, it is based on half truth. It has partial resemblance if not to what is typical at least to what is distinctive. It is of course as misleading as that for Oxbridge, but, I fear, will prove just as enduring.

Leeds less than frank, PO says

The Post Office has charged Leeds University with a most heinous crime. It alleges that the university is guilty of sending unstamped correspondence to Cambridge University inside one large envelope.

The Post Office "fraud squad" was quick to uncover this practice and has now issued a stiff warning to the Leeds University authorities.

The letter-points out that Leeds has committed no small offence. Even the recipients of the correspondence—those innocents at Cambridge—could become involved.

While Leeds has, for this time at least, escaped with a verbal caution, the Post Office will be watching to see that the intricate sub-sections of the Post Office Act are never broken again.

The most serious loss of potential students still happens at 16

Why teenagers decide on further study or look for a job

meanings. This means that the information obtained from the examination passed. Retrospective attitudinal information is useless.

Hopefully another such long-term longitudinal study will be mounted. However, it is many years before such studies need information relevant to the planning of secondary and higher education, an interim measure a longitudinal study in which children are picked up for such studies in secondary school could be considered.

Concluding remarks

There is little doubt that in the long run such a study could and very much improve planning and decision-making in the provision of facilities

Such a study can reveal, as the pilot study has revealed to some extent, the type of counselling likely to be effective and which incentives pupils respond to. For planning purposes the long run art must be to develop easily obtainable statistical indicators that can be used to monitor changes in the level of demand and thus to improve short and medium term forecasting of demand and planning and policy.

To meet it. From a more fundamental research viewpoint there has been no previous major study of the social perceptions of school children, and not for some years a study whose main purpose is to relate in detail social background and personality attributes to the whole range of behaviour, attitudes and choices of pupils in secondary schools. As well as being immensely valuable academically, such a study could provide a wealth of information invaluable for policy-making purposes.

To the two authors the present pilot study suggests that while social class and school type are important, there is little disturbing evidence of a serious reversal of the te-

There does, however, appear to be a serious loss of potential talent to the educational system, and this loss has been made more worrying by the recent declining trend in staying on in education after the compulsory education. Those who leave certainly have much lower career and economic expectations than those who pursue their studies further.

In general there is evidence that the economic environment presents opportunities to influence the educational decisions of many students.

While the nature of the present surveys makes it impossible to monitor them this is a clear challenge to research in the area of demand for further and higher education are caused by changes in the private economic advantages of educational qualifications, this is at least a plausible hypothesis. The test is to be conducted how quickly pupils' perceptions of economic benefits react to a change when the actual benefits change and how quickly and to what extent their previous intentions change. Longitudinal studies are required for both.

It may, in the event, prove that policies for higher education based

Attitudes of Young People
School, Work and Higher Education
a preliminary report by Gareth W.
Williams and Alan Gordon of Lancaster
University's Institute for Research
and Development in Post-Compulsory
Education.

quite detailed information about job aspirations and earnings expectations. This should be developed considerably.

Some measure of ability is absolutely necessary and needs to be incorporated into the questionnaire. Ideally the whole survey would be integrated into a major longitudinal survey from birth such as that being carried out by the National Child Development Trust. However,

The next round of data collection in this study should certainly be used to collect retrospective information on their secondary school careers where this is likely to be meaningful. This means factual information such as examination passed. Retrospective attitude information is useless.

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TABLE A

Index having a value 1 when all in the group think the item "very important" and 0 when all think it "not important".

Items mentioned by fewer than 50 per cent as being either "very important" or "fairly important" were in decreasing order of importance: The course should not be too difficult; it is nearer home than the others; I prefer to be in a large town; I think this institution on the advice of my teacher; I have a friend going there; The students are said to be politically active.

TABLE B
Higher education by intention after leaving school

	1	2	3	4	5	6	7	8	9
A doubling of the value of grants would persuade many more people to go to higher education	3.7	3.6	3.8	3.7	4.0	3.8	3.7	3.5	A doubling of the value of student grants would not persuade many more people to go to higher education

Index 1-5, where 1=everybody agrees with statement on right and 5=everybody agrees with statement on left

TABLE C
In certain occupations where there is a marked difference * between respondents with
different intentions

100

TABLE D

Intentions on leaving school by
perceived earnings differential

Job/study	11	10	14
Temporary employment	9	9	8
Other	6	4	5

* Low: Perceives no or little salary differential in favour of graduate jobs (about 32 per cent of boys and girls).

† Medium: Perceives a moderate salary

* High: Perceive large differential (48 per cent of boys, 26 per cent of girls).

TABLE E
Medians of anticipated earnings at 26

16-year-olds going to full-time further education	2808	1456
16-year-olds going to part-time further education	2704	1924
16-year-old leavers	2496	1924
	2392	1612

To the two authors the present pilot study suggests that while some interesting changes are occurring there is little disturbing evidence of a serious reversal of the tendency for most of those who stop ceaselessly complete a sixth-form course to aim for some form of further or higher education.

There does, however, appear to be a serious loss of potential talent to the educational system, and this loss has been made more worrying by the recent slackening trend in staying on in education after the end of compulsory education. Those who leave certainly have much lower career and economic expectations than those

In general there is evidence that perceptions of earnings and career opportunities do influence the educational decisions of many students. While the nature of the present survey makes it impossible to move from this to a claim that the change in the growth of demand for further and higher education are caused by changes in the private economic advantages of educational qualifications, this is at least a plausible hypothesis. To test it we need to examine how quickly pupils' perceptions

of economic benefits refer to a change when the actual benefit change and how quickly and to what extent their previous intentions change, when their perceptions change. Longitudinal studies are required for both.

It may, in the event, prove that policies for higher education based on individual demand for places and policies based upon economic benefits are not so much in conflict as some commentators have feared.

Attitudes of Young People

School, Work and Higher Education is a preliminary report by Gareth Williams and Alan Gordon of Lancaster University's Institute for Research and Development in Post-Compulsory Education.

ACADEMIC DEVELOPMENTS

Now it's art for information's sake
in Royal College graphics

by Sue Reid

The Royal College of Art is launching a new postgraduate course in graphic information this October. The course, one of the first of its kind, will help young graphic designers to cope with the demands of scientific, technical and educational publishing.

The two-year course, to be organized by the School of Graphic Design, is primarily intended for first-degree graduates in graphics. But there are plans to widen the scope in the future to allow an intake of graduates in related fields.

Between six and 10 students will join the course this October. They will gain experience of microfilm and learn other techniques of information publishing including printing.

Areas to be covered will include computer-aided graphic design, computer typesetting and photo-composition techniques. Methods of objective research and evaluation

and the statistical analysis of results will also be covered.

The course, leading to a master's degree, is intended for graphics students who have developed an analytical rather than intuitive approach to graphic design, and who are interested in the problems of communicating information. They will be asked to look at the contribution objective research can make to solving complex design problems in areas of publishing involving the communication of information.

Students will have individual tuition and a course of study will be designed to suit each student's particular needs, interests and aptitudes. They will be encouraged to take an active interest in projects currently being conducted by the Readability of Print Research Unit at the Royal College of Art and the work of similar departments within the college.

But they will also have the chance to spend some time outside the college working with research

bodies and in industry. The organizer of the course, Dr Herbert Spencer, is particularly keen that students should see the work going on in other institutions, especially those with interests in specific areas of graphic information.

Mr Brian Cox, a research fellow in the college's print research unit who will have specific responsibility for the new course, said this week: "We will try to give students a scientific outlook. We want them to approach graphic design in a more scientific way."

He added that in the future the course could be tailored to suit the needs of other types of graduates. Librarians or information scientists could benefit from a postgraduate course in graphic information especially if it was theoretical in structure.

Students applying for the course will be asked to complete a special written paper as well as submit a portfolio. The written paper, which can be completed at home, will be aimed at discovering the ability of candidates to think logically. Only those who successfully handle the written paper will be asked to attend for interview.

UEA's plans will boost
social work degrees

by David Walker

The contribution made by the university towards social work teaching has expanded rapidly in recent years and it plans at the University of East Anglia to fruit the numbers of university-trained probation officers and social workers will be boosted further.

A new two-year master's degree course in social work from October and is currently seeking the approval of the Central Council for Education and Training in Social Work so the course can provide official qualification in social work.

A spokesman commented: "The need for a high standard of social work education is increasingly recognized as social workers are given greater responsibilities for maintaining the quality of life in society. Yet in the local authorities, at the last count, only 37 per cent of all basic grade social workers were qualified."

"The UEA is now accepting a major responsibility to serve the community by training social work students to a high standard of practice."

The course will be open to graduates of all subjects and the

course director, Dr Martin B. H. expected that they would be a great number of people seconded from authority social work or the probation service and those with experience.

Many of the placements of students on the course, which will be in residential homes, work offices, residential homes, traditional seminars and universities, will be with Norfolk, Suffolk and Cambridgeshire county councils.

Dr Davies said: "I think it should be taught by a person because it brings academic rigour to bear on the subject. It is because students can be taught to learn about government and practice. They will have to argue the arguments for and against the operation of the social service."

One of the emphases will be sociological, but not, Dr Davies said, in the misleading sense of sociology with community work. One of his past interests, "microsociology—the sociology of family life and what happens within small neighbourhoods"—will be a focus, he said, for the study of social psychology and to be exploited in social work.

First-ever joint venture results in
second-level OU genetics course

by John Ross

The Open University's new second level genetics course, which started last week, was developed in a unique way. For the first time there was what the Open University calls "full and formal" collaboration with other universities—Birmingham, Hull, Sussex and York—who will integrate the teaching material into their own courses.

A joint team developed the course over two and a half years and the Nuffield Foundation made a grant of £88,000 for the project, allowing its academic writers to withdraw from most teaching and other duties at their own universities.

Professor Steven Rose, professor of biology at the Open University and course team chairman, said: "We were very much encouraged by the Nuffield Foundation because it was anchored to extending Open University techniques to other universities."

"The foundation also enabled us to employ a research assistant who tested the material on volunteer students in universities, teacher-training colleges and in the Open University. This enabled us to modify the material."

Professor Rose said the course was designed to put genetics in a social and historical framework. It was a comprehensive course which filled serious gaps in the teaching of genetics and he hoped it would be taken up by other universities, polytechnics and colleges.

The course consists of 16 correspondence texts linked to 16 radio and 16 television broadcasts. Three of the texts are devoted to subjects which the team feel are usually treated "in a patchy way": history, social relations of genetics, and human genetics, including a case study in "race IQ" debate.

In some of the broadcasts, genetic pioneers such as Dr Francis Crick give a personal account of their work.

The students will also have a "package" of experiments to do

at home including genetic tests on tomato seedlings and on organisms, and a set of observations to be made on humans, which will be analysed centrally.

The Open University feels genetics is a particularly suitable subject for development in many institutions do not have a range of genetic skills resources among their teaching staff.

The participating universities have free access to the video audio tapes, and other materials. Other universities will be able to buy them as a significant development in their marketing of educational technology.

The course, which is given at half a credit and is one of the most highly subscribed second-level courses, with 920 students.

Queen Mary College, London, offering the first two-year genetics MSc in genetics in the country in October 1976. It is aimed at full-time employment in education, industry and medicine.

Teachers choose study speed

A part-time degree course intended to offer both flexibility and wide choice for qualified teachers seeking graduate status is to be offered by Bulmershe College of Higher Education next September.

Teachers will be able to regulate whether they spend between three and six years on the course, which offers a wide variety of options enabling teachers to specialize in problems they feel are pertinent to their jobs.

Teachers can also choose between an ordinary bachelor of education or an honours course, depending on their performance either in three of their study units or in the final award of the ordinary degree.

Mr Peter Seaborne, dean of the School of In-service and Research at Bulmershe, intends that classroom teachers are given ample opportunity to adapt to academic study. The course starts with foundation units which enable teachers to re-orientate themselves to studying and to look at the skills of classroom teaching through personal and group evaluation and techniques such as micro-teaching.

They will also be introduced to decision-making in schools, particularly with reference to curriculum and will have the opportunity to study classroom research or practical projects in schools. Practical projects include a scheme for a workshop based on the school or classroom.

The college wants to attract teachers who already have jobs with local authorities, rather than those seeking employment. Most of the study periods will be in the evenings although two summer schools are included in the programme.

Mr Seaborne added: "The course should provide teachers who cannot get full-time secondment with an opportunity of studying for a degree. More important is the fact that we have tried to turn the disadvantage of a part-time course into a positive advantage so that the programme can be adapted to a teacher's needs."

The college is aiming to recruit 60 part-time students in the first year.

Social services scheme launched

The Central Council for Education and Training in Social Work is pressing ahead with its new curriculum in social work education in local authority education colleges.

In the New Year, preliminary training for the curriculum will be at colleges in the West Midlands and Strathclyde College of Education in Glasgow. In addition, schemes at Brunel College of Education and at the University of York will be launched in October.

The certificate of social work is intended for and by social workers who would not be served by the council's well established Certificate of Qualification in Social Work.

The School of Biological Sciences at Queen Mary College, University of London, is inviting applications for a new BSc degree in Biology to start in October 1976.

This option gives formal recognition to students who have worked for some years under a course unit system. Students have been selecting courses in animal biology, plant ecology, marine biology, environmental physiology and comparing them with other courses in the physical, mathematical and earth sciences.

TEC goes into rubber The Technical Education Council is to offer a new certificate in rubber technology for plastics and rubber technology. Two courses are expected to be established next September.

Some engineers like it hot

A new MSc course in civil engineering in hot climates will be offered by Dundee University from 1977.

About 20 students, many from overseas, will take the course. The university qualification is an honours BSc in civil engineering or equivalent.

The course is the first of its kind for postgraduate civil engineers.

British companies are becoming increasingly involved in countries with hot climates, which requires particular engineering knowledge. Among subjects studied will be water supply and sewage treatment, properties of soils and structural materials and development of economic

David Walker interviews Sir Charles Wilson

Bonnie Charlie's soon awa'

"Woe Charlie" as the Glasgow academic staff irreverently call Sir Charles Wilson is stepping down from the principalship he has held since 1961. The university urged him to stay on but he departs this summer for his retirement home in Galloway insisting that the ideas do not come quite so thick after 65.

Before he finally leaves the university that he first came to as a student in the 1920s, he will win, as his life-long friend and colleague, Jack Logan of London University winced last year, at the tributes and memorials such as a marble bust and a memorial lecture.

He has been at the head of a university since becoming principal of the University College of Leicester in the early 1950s, and so his departure marks the end of a quarter of a century of university history that will stand out among future historians' chapter headings.

Although his basic instincts are conservative Sir Charles has contributed to an era of massive university growth and change. The University College at Leicester became a full university, growing in numbers; Glasgow, already large, grew larger, taking on new faculties and subjects. The Vice-chancellors committee blossomed, the new universities were created, all universities began to respond to new pressures from government and society at large.

However difficult it might be to specify his detailed contribution, Sir Charles played a central role in the successful adaptation of universities to new functions, new students and new demands—without any fundamental changes in their basic values.

At Glasgow Sir Charles has been a "domestic" vice-chancellor close to his heart and the craggy Scottish Gothic of the university's main buildings. Though he has served the Committee of Vice-Chancellors and Principals, including a spell in the 1960s as its chairman, and the Association of Commonwealth Universities—last week he flew off to New Zealand on its behalf—the smooth running of the university has been his main concern.

Perhaps fittingly for such a "community university" taking the bulk of its students from within a 30-mile radius, Sir Charles has not been a great propagandist outside. Within the university, too, he has kept his distance, eschewing both the money-favoured by some of his colleagues south of the border and the half-fellowship of his predecessor, Sir Hector Neherington, whose memory is still tended in the university.

Something of this comes over in his attitude towards the students. "I am pretty accessible, but people may not choose to come to look for me," Sir Charles said. "I have no love of ceremony for its own sake. Sir Charles is firm that if ancient academic rituals are mounted, they should be performed punctiliously. He mentions the need to keep up standards at degree ceremonies, worthwhile because they are such an 'arresting moment in the student's life'."

But any impression of coldness in the man is belied by his relaxed manner and personal warmth; he has a ready smile giving way sometimes to an almost jumpy humour.

Trained as a historian and constitutionalist he is no sluggard at the arts of university management even in a large faculty-based university like Glasgow. His recollections of Oxford, where he spent over a dozen years, and Leicester betrays some regret for a smaller academic environment; in an Oxford college everyone took part in the "academic conversation"; at Leicester in the university's formative years there was a "band of brothers".

But for all that, he understands Glasgow and the weight of traditional forms in a university which has had only 25 principals since the fifteenth century.

Power is broken up into the faculties which until 100 years ago were the various student bodies—several student unions, and a separate students' representative council. All in all, "it does not rise to an easy head of steam".

Glasgow had its share of student discontent, though not in plume with national patterns. A story is told of how once in the 1960s the students marched in procession round the old university administration buildings where the principal lives chanting "Wilson out." Sir Charles' housekeeper, a good Scots Tory, mistook the reference and thinking of the Prime Minister pulled back the curtains to nod and pestered in support. Confronted by this apparition of subversion within, the students were non-plussed.

Taken as a whole his career has an exemplary coherence. Two strands can be roughly discerned.

With his soft Scots accent and occasional Oxford intonations, he is what the smart set in Edinburgh riding the nationalist wave like to call an "Anglo"; someone who left Glasgow for the soft pastures of the south and stayed there.

In fact Sir Charles taught briefly at the London School of Economics in the 1930s, before moving to Oxford as a college tutor teaching modern history and PPE.

After Leicester Sir Charles returned to Glasgow, and the coherence of his career lies in how well his experience of various universities knitted together; it seems to show that the values underpinning the United Kingdom universities despite their superficial differences are a seamless web.

The Oxford years remain with Sir Charles especially in his respect for the college as a model academic organization. In his college, Corpus Christi, he says all the tutors did a bit of everything, teaching, administration and research.

Together with his work writing a charter for the embryonic University of Leicester, granted in 1957, Oxford fitted him well for the task of launching the new universities. Sir Charles served on the academic planning committee of Sussex University and then chaired the planning board for the University of East Anglia. Later he did similar work for Stirling University.

Sir Charles Wilson

The Leicester years were active. There was work to be done preparing the University College to take the path of Southampton, Nottingham, Reading and Hull into full university status.

Sir Charles remembers the charter writing committee as a "great talking shop", which married with his own intellectual interests in constitutions and the history of institutions.

Exciting, too, were the back of envelope calculations they were making of future population trends and how the university could have to expand to accommodate new students. In all this there was a need to convince the city of the validity of what the university did.

The preparations for growth went on when he returned to Scotland. Externally there was the shock of another university setting up across Glasgow; here Sir Charles played an active part in the academic advisory committee that helped the Royal College of Science and Technology turn into Strathclyde University.

He also served on Lord Hewart's committee on the social

sciences, which he considers in retrospect would have done better to have used the undoubted imagination of its member and write a fresh blueprint for the growth of the social sciences rather than fall prey to the conflicting evidence presented to it.

At the end of his career Sir Charles remains wedded to the United Kingdom context. The Scottish National Party he considers fictitious as well as factitious and stands by the views he presented in serious form in a dissenting note to a committee on devolution set up by the Heath Government: he is against devolving Parliament. Sir Charles is no public Tory, but it probably would not be wrong to call him a liberal unionist.

The other strand in his career concerns this merging of man and institutions. In many ways Sir Charles' work is submerged in the progress of the universities he has headed and making judgments about it is difficult. Leicester and Glasgow flourish, and at least some responsibility for that lies at the stout old door of Sir Charles Wilson's principal's office.



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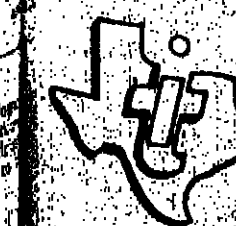
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'Damned regulations' may be cut by Ford

President Ford thinks the American Government interferes too much in higher education. In particular he believes that "affirmative action"—setting numerical targets for universities and colleges to aim for in their intake of women and minority students and lecturers—has not worked and ought to be changed.

Recently the President discussed "affirmative action" in an informal meeting in the White House with four leading academic authorities—two favouring the policy and two against it. The policy is unlikely to be scrapped, but there are strong hints that the President wants to remove the action that is gradually being attached to it. The Departments of Labour, Justice and Health, Education and Welfare are holding joint discussions on what to do.

Dr Robert Goldwin, the President's personal adviser on higher education, is one of those who believes that the policy has got out of hand. "We are now going on the assumption that everyone is guilty until proved innocent," he says. "Why not simply eliminate the regulations and say that if there are any complaints we will look into them?"

Affirmative action has accomplished nothing at enormous cost, Dr Goldwin maintains. Since the policy began the proportion of the white-collar workforce has risen from about 19 per cent to 20 per cent. Quoting Mr Edward Levi, the Attorney General (and former President of the University of Chicago) Dr Goldwin adds: "Nothing will be done that numerical goals are not the same as quotas."

Dr Goldwin's views are immensely important, for as "academic in residence" he is the university world's representative among the President's advisers. He arranges seminars on major policy issues such as affirmative action, energy conservation, and ethnicity, picking people from colleges and universities noted for trenchant views who will put their case succinctly and helpfully at informal luncheons during which President Ford listens down when it comes to recruitment of black teachers. The pool was too small, and so universities, to maintain their "quotas", tried to steal teachers from all-black institutions which wanted to remain black and resented this poaching.

Dr Goldwin has not offered any solutions himself; that is not his job. He filters the main issues to the President, ensuring that all sides are heard but not pushing a line of his own. If he did otherwise, he could be called education's Dr Kissinger.

In a recent speech he summed up his approach: "Find the best and hardest questions to ask, then try to answer them. Work along with you in searching for good answers for better questions. And the only rule of teaching I ever found helpful was this simple one: don't answer questions that haven't been asked."

More youngsters turn to pot

For the first time a majority of college-age Americans have smoked marijuana, according to a study released recently by the Department of Health, Education and Welfare.

Dr Robert DuPont, director of the National Institute of Drug Abuse, said smoking marijuana was less dangerous physically than cigarettes or alcohol. But he said the use of all three by young people was "advancing as a front."

There was no evidence that marijuana impaired the intellectual performance of students, he said, but marijuana users had greater difficulty than non-users in deciding their goals.

The report said: "What was once clearly statistically normal behaviour has become the norm. While in previous years use was correlated with levels of education, the percentage now reporting marijuana use is virtually identical for high school dropouts, high school graduates, and college graduates in similar age ranges."

Angela Davis invited to Stanford post

Angela Davis, the black Marxist radical, may teach at Stanford University later this spring. She will go at the invitation of students, and will probably be paid by the students rather than by the university.

At the moment Miss Davis, who was the centre of a major student campaign during her imprisonment pending a murder charge a few years ago, is at the Claremont Colleges, California, where she holds a one-year appointment as a guest lecturer.

If she went to Stanford, she would teach a course entitled: "The female condition: a search for a Marxist approach". It would be one of the "undergraduate specials"—a series of courses outside the regular departmental structure which require a sponsor from the teaching staff and approval of the outline and material. Stanford students have nearly \$10,000 available in funds for these courses, which were approved in 1974.

The student Senate voted to invite Miss Davis last week. Ernest Mandel, a Marxist economist from Belgium, and Claude Steiner, a radical clinical psychologist, are also being invited, but the students do not expect Mr Mandel to get a visa to enter the United States.

A few of those invited to teach at Stanford under this scheme have been able to take a year's appointment. A preliminary inquiry was sent to former President Richard Nixon this year, but he did not reply.

Justice is served

A professorship of justice in American society has been established at Stanford University with a gift of \$600,000 from the McDonald-Aeroplane Foundation. The Rev. Robert Heile, a Jesuit who is retiring president of Georgetown University, will be the first holder of the chair.

The new chair will deal with areas in American life in which the principles of justice are particularly important: Law, medicine, health, government, management and labour, and international relations.

"Affirmative action" as a policy has proved a costly failure, he argues. There are university presidents in the Cabinet—Edward Levi and David Mathews—and they know what this is doing to universities.

"Some people argue that the only thing wrong with affirmative action is that the list of minorities is too narrow," he says. What about Catholics, who with 30 per cent of the population were under-represented at universities? Or Jews, who were certainly a minority? Minority is a qualitative word. We have made it a qualitative word."

The policy broke down when it came to recruitment of black teachers. The pool was too small, and so universities, to maintain their "quotas", tried to steal teachers from all-black institutions which wanted to remain black and resented this poaching.

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Aspen Institute hands over HQ but will keep up courses

The original headquarters of the famous Aspen Institute in Colorado have been given to the University of Denver, it was announced last week. Programmes on the 30-acre site will begin later this spring.

The Aspen Institute for Humanistic Studies, which organizes international conferences, seminars and lecture courses around the world, will continue to hold its summer programme in Colorado, and will maintain complete control over its courses.

The gift, involving several million dollars, is mutually beneficial. The institute has now established centres in New York, Washington, California, Germany, Japan, and elsewhere, and uses its original base in the Rocky Mountains only for an intensive three months in the summer. A considerable portion of its privately raised funds had to go towards the upkeep of the buildings during the rest of the year.

The University of Denver, now financially responsible, plans to use the library, music centre, lecture halls and physics centre for a new series of undergraduate and postgraduate courses in humanities, social and natural sciences as well as in law.

Aspen's summer programmes, which began in 1950, after a wealthy industrialist donated a nineteenth century building town into an independent festival of the arts, have been a success. Many distinguished scientists, including Mr Roy Eckstein and Mrs Shirley Williams, have taken part in programmes that have been described as "thought leading".

Apart from the intellectual worth, the institute's chief attraction is its idyllic setting.

Quebec's Minister of Social Affairs, M. Claude Forget, has just authorized a \$100,000 two-year grant to the faculty of Medicine at the University of Sherbrooke for the development of a centre for experimental research in acupuncture.

The money will be used to set up an interdisciplinary team to investigate the scientific value of acupuncture, and its therapeutic and analgesic properties.

An acupuncturist will be brought from China, and experiments will begin on animals. Eventually the programme, which the university emphasizes will be conducted with "the maximum scientific rigour", will include tests on people—and there is not likely to be any short-age of volunteers as acupuncture has raised considerable interest in Quebec.

Quebec to study acupuncture

The committee was divided as to whether to ban such employers from Stanford a ban might cost the university about \$4,750,000 a year as it would effectively stop military recruitment on the campus and provoke a cancellation of defence contracts.

The committee urged employers to be more explicit in their policies towards homosexuals so that students could judge whom to seek employment. It was difficult for students to ask inquiries directly, the committee said, as such inquiries might prejudice their employment.

Discrimination fear over homosexuals

All employers using campus facilities at Stanford University should be required to state whether or not they discriminate against homosexuals, a university committee in services to students has recommended.

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Do-it-yourself home laboratory boosts biology

A portable biology laboratory has been developed by a group of young scientists at the University of California, Berkeley, which has markedly improved the teaching of first-year biology.

The laboratory consists of a series of experiments which can be conducted at home using cheap, simple equipment and a programmed guide. Students work at their own pace, and use the extra laboratory time in field studies and less routine experiments.

The take-home laboratory was described by two of its originators, Dr Ann Marie Norberg and Dr Ruth von Blum, in a recent issue of the American Institute of Biological Sciences' *Education Review*.

The new kind of home-based experiments included: observing characteristics of soaked seeds; analysing plant development and devising means of control; and investigating photo-synthesis with a water bath, a lamp, a test tube and the appropriate chemical solution.

Students at home studied the life-cycle of the fruitfly, observing its development and bringing vials of maggots back into the laboratory to make counts and genetic crosses.

The Berkeley group decided to separate the observational, training and investigative functions of the laboratory. Using the 600 students taking the introductory course of first-year biology, they designed a series of experiments which could be conducted at home using cheap, simple equipment and a programmed guide. Students work at their own pace, and use the extra laboratory time in field studies and less routine experiments.

Sweden

'Too traditional' OU not right for Sweden, commission says

from Mike Duckenfield

STOCKHOLM The creation of an independent, nationwide "open university", like Britain's, would not be the best solution to Sweden's need for a comprehensive system of post-secondary multi-media distance education, according to a recent government commission report.

Although not rejecting such an alternative outright, the report—issued by the TRU Commission on Educational Broadcasting—favours a more decentralized system, based on the new regions created in last year's reform of higher education.

While an "open university" theoretically would be able to offer a wider range of subjects due to its national catchment area, the cost would be prohibitive. A decentralized system would provide only about 50 different courses in each region, against the Open University's 70 nationally. But, being locally planned, the courses could be more flexible, adapting to community needs, including those of industry.

In addition, the commission reports that students might run the risk of being too anonymous in a national organization; that fixed costs would be larger; that a regional network of field organizers would have to be created; and, perhaps above all, that Sweden already has an extensive system of adult education.

The 245-page report emphasizes that "distance" is not only measurable in miles, but also as a product of working or social conditions. The four tasks for the new education should be to reach the educationally underprivileged, provide recurrent education and reduce costs, as well as bridging geographical distances.

Courses should be short and limited in object rather than complex of courses lasting several years and leading to examinations. They should be vocationally oriented, and designed to encourage participation of those with little or no previous experience of post-school study.

Regarding entry qualifications, the report says that it is important to avoid being swamped by the poorly educated. Experience of working life should be made a criterion for selection and a regional quota system might be worth using.

Distance study should include individual study, tutorial supervision—although the report does not specify whether this should be by telephone, letter, sound cassette or a combination of all three—study guidance and group work, concentrated courses, radio and television programmes, and some form of examination or assessment.

Study guidance is a neglected special attention from the commission. It suggests that local teachers with professional experience of adult education, but not necessarily qualified in their subject areas, should help students at their homes. They should assist students to make use of instructional materials and

Italy

Florence fights to keep 'Teleuniversity'

from Patricia Clough

ROME The Italian government has launched a diplomatic offensive to keep in Italy the European University Institute for Teaching at a Distance, which the Council of Europe had planned to set up in Florence.

Italians are apprehensive about the Council of Europe's decision next month when it is due to consider proposed modifications to the original plan. These include concessions to Florence's rival candidate, the German university town of Tübingen.

The 38-nation Council agreed in principle in 1971 to set up the institute, which for purposes of brevity has been slightly misnamed "Teleuniversity". Florence was designated as the headquarters.

As originally conceived the purpose of the institute, in the initial stages, was to provide all available information about university teaching at a distance and to coordinate further studies. This will involve everything from



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"As man used to believe"—a poster for a TRU series on the history of scientific thought.

help them organize their work and clarify their problems.

Where appropriate, such as in certain vocational courses, people from local trades and professions could be used to give the guidance, which is also seen as a way to bolster students' motivation and lessen the drop-out rate. Field experiments with local teachers should begin as soon as possible, the report says.

Following the successful use of summer schools by the Open University, the commission recommends that students should get together for concentrated courses from time to time, although this may be more of a problem in the thinly populated parts of Sweden.

Radio is seen as vastly more important than television, and the report says that, in relation to costs, the effect of television programmes in providing encouragement and motivation has been overrated. Television would be worth using on a national basis only for particular courses, whereas radio could be used more extensively, especially as Sweden is to get a network of 24 local stations next year.

Before drafting its report, a special working party of the commission was set up in December 1972, to look at past Swedish and international experience in providing post-secondary distance tuition. Among the systems examined, apart from the Open University, were Telekolleg in Federal Germany, Funkkolleg in Poland, and the Chicago TV College and Poland's Polytechnika Telewizyjna.

Although Sweden offers considerable adult tuition possibilities, it has not had a great deal of experience with distance teaching, especially with multi-media techniques at the university level. However, these are now being encouraged as part of the reorganization of higher education which will bring permanent tertiary institutions to 21 cities by the end of the present nine-year period.

Decentralized university education has been in operation since 1962, and this year about 60 courses, mostly part-time, are being run in 27 cities by the local school authorities in conjunction with the Office of the Chancellor of the Universities. However, only about one-third of students are 25 or more and most say they would have studied full-time at a university if one had been nearer.

An exception is Umeå University in northern Sweden. There 50 courses in 29 subjects are available to outlying students this year through a series of radio programmes. Early evaluations have been very encouraging, showing that as many as 90 per cent of participants are mature students; more than one-third had not completed secondary schooling; about 80 per cent have jobs parallel to their studies; and 80 per cent intend to aim for a full degree.

But probably the most outstanding success in multi-media tuition has been the START project in teaching adult beginners' English. Linking texts, radio and television instruction, records, tapes and filmstrips, teaching started with 107,734 participants four years ago. After three years 710,000 of the six consecutive texts had been sold, and the materials have now been translated and adapted for use in Denmark, Norway and Finland.

Designed for those with minimum schooling, it has been calculated that one adult Swede in 25 has taken part in START so far, with 80 per cent aged 25 or over, 55 per cent living in rural areas, 75 per cent with only six years of compulsory schooling, and 33 per cent not having studied anything since leaving school.

In its international survey, the working party had several reservations about the Open University. Chief of these was that it had not succeeded in radically altering the social bias in recruitment to post-school education, and that it had not done enough to actively recruit the least educated.

The working party also felt that information about studies had been insufficient and far too general, the charging of fees and lack of study assistance discouraged those with low incomes; education had no connexion with the work situation of students; and that teaching was too traditional and academic without sufficient attention to the particular needs of individual students or groups.

On the other side of the coin, it was felt that the Open University had been remarkably successful in its course planning and material (including the international marketing), that costs were low, the drop-out rate favourable, and that its geographical coverage through 260 study centres was good.

A report is now being considered by the Education Ministry, and a Bill is expected later this year. The report summary (Distance Education) and complete extract on international systems (Distance Education Systems) are available from the TRU, Department of Information, P.O. Box 6182 71, Stockholm, Sweden.

Both calculations depend heavily on data supplied by the universities, which in some cases has to be sanctioned by the regional ministry of education. While in the mid 1960s the universities were justifiably accused of obstructing internal reforms they and their professors are once again subject to widespread criticism.

The discussion centres almost exclusively on quantitative aspects. An example is the fierce public debate which has been conducted for three months between the new magazine *Der Spiegel*, the Hochschulverband (the university professors' professional organization) and the Parliamentary Secretary of the Federal Ministry of Education.

A long article in *Der Spiegel* claimed that the universities had substantial under-used capacity and that overall (ie, neglecting differences between individual subjects) the number of "hidden" unused places approximately matched the number of unsuccessful applicants.

The article quotes new research on available places in medical schools carried out for the Federal Education Ministry by a team at Frankfurt University. Comparing 16 universities by what appears to be a highly complex method of calculation the survey found a strong deviation from the figures of available places for new admissions currently used by the Central Admissions Office, and nine universities.

The universities, including those at Göttingen, Frankfurt, Marburg and Munich (technical university), should, according to the researchers, be able to admit approximately 1,000 more students.

The *Der Spiegel* article further revealed that the Federal Admissions Office had discovered some startling discrepancies: in Heidelberg, for example, 235 new student places had been created between 1963 and 1974, yet the number of students had actually fallen by 133.

The article blamed the professors for this state of affairs, and especially their professional organization, of active and passive obstruction, and stated unequivocally that by using the sacred word of "university autonomy", university teachers were partly responsible for the present problems.

In an interview accompanying the *Der Spiegel* article, the Parliamentary Secretary of State in the Education Ministry, Hans-Joachim Lauth, Minister's conviction that student capacities can and must be increased, and that there were some professors who, instead of co-operating with the government, put their own interests first.

The president of the Hochschulverband replied in a strongly worded open letter. He has denied any responsibility, blamed the education policy of the past decade, when the politicians encouraged pupils to stay on at secondary school but at the same time failed to embark on adequate long-term planning.

In January, the Parliamentary Secretary of State replied in another open letter. He stressed that the interests of universities and politicians will almost inevitably diverge, yet in the last resort the decision about how many students and graduates there should be remained a political one. He pressed his conviction that the quantitative expansion of the education system was right; the mistake was the failure to adapt the system quickly and effectively.

But those who had struggled hard to qualify for university entrance must not be disappointed, and a joint effort is now required by all involved.

West Germany

Universities accused of errors in reform programme

from Günther Kloss

BONN The period of bold, yet often over-ambitious and unrealistic—and thus only partially successful—reforms of the structure of German universities has definitely come to an end. What remains is the same problem that first began to confront universities and governments in the late 1950s and early 1960s: the rapid rise in the number of qualified grammar school-leavers who demand a university place.

Until a few years ago these school-leavers usually got a place. In 1960 there were 251,000 students in all types of higher educational institutions. In 1975 their number had almost trebled to 842,000, and the forecasts are that until 1985 something like 1,250,000 additional school-leavers will want access to higher education each year.

Only after this will the effect of the fall in the birth rate make itself felt. Thus the provision of new university places is still going ahead, but for the present it cannot keep pace with demand.

Almost all courses are now affected, and last year more than 40,000 university applicants were unsuccessful.

At a time of financial constraint, there is a demand for the most intensive use of existing capacities. Official calculations of the student body, based on space requirements relating to student place and a formula which relates the number of available staff teaching hours to the required number of student contact hours. But these norms do not yet cover all subject groups, and the experimental stage of the formula has just been completed.

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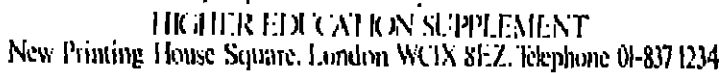
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In January, the Parliamentary Secretary of State replied in another open letter. He stressed that the interests of universities and politicians will almost inevitably diverge, yet in the last resort the decision about how many students and graduates there should be remained a political one. He pressed his conviction that the quantitative expansion of the education system was right; the mistake was the failure to adapt the system quickly and effectively.

But those who had struggled hard to qualify for university entrance must not be disappointed, and a joint effort is now required by all involved.



At one university in the United States, that of North Carolina, the Ph.D. student on finishing his coursework must undergo oral examinations. These are conducted by his "committee" which is selected by the dean of his school and which consists of five members of the academic staff including his supervisor. One member of the department in which the minor subject was studied.

David Harris has written before on the important question of student-teacher relations in education. It is unfortunate that on this occasion he has obscured this serious issue. It has been recognized that the

Alternatively, and better, the DipHE could be placed by an ordinary degree time or sandwich, to be followed by a master's degree, if desired by additional honours or a master's.

Yours sincerely,
A. BUCKLEY,
Principal,
Southampton College of
Technology.

Constable Bicentennial Exhibition. Unt
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BOOKS

Moral acts

Values and Evaluations
by Z. Najder
Clarendon Press: Oxford University Press, £4.50
ISBN 0 19 875035 8

Much in recent philosophical discussion of morality has turned on whether moral judgments should be regarded as fundamentally cognitive or non-cognitive; that is, as conveying, or purporting to convey, a certain kind of information or as simply registering options and guiding actions. Dr Najder thinks them cognitive. In his view the information which they convey is of two kinds, direct and indirect. Directly, they tell us the position which a given object occupies in the scale of values and criteria of some given value-system. Indirectly, they tell us the probable reaction to the evaluated object on the part of men belonging to the same cultural milieu. To evaluate is not, however, only to inform, but also to influence. The two are related in that the influence would be purely adventitious if it were unsupported by the relevant information. Nevertheless, they can be separated in that it is possible to use the information without responding to the influence.

A key concept is that of "axiological value". Najder defines it thus: "M is an axiological value if and only if M is a judgment, ascribing the quality of valueableness to objects, properties, or states of affairs, and constituting within the given value-system a final justification of other judgments of the system." For instance, "Courage is valuable" would be an axiological value. It is constituted by the ultimate justification of moral judgments. Najder differentiates the "motivational" and "theoretical", i.e. what is an ultimate value for a given man or society and what is an ultimate value in some theoretical system. The interest of his view is not, of course, in the notion that moral judgments convey psychological information, but that they convey information which is in some sense objectively moral.

It will be evident that his main target in the polemical parts of the book must be those modern philosophers who sharply divide influence and information, "ought" and "is", in their account of morals. Not only does he accuse them of overlooking the cognitive content of moral judgments but he thinks that they misrepresent moral values by differentiating them too sharply from aesthetic, social, political and cultural values. However, his book should not be dismissed as just one more attack on presentism; it develops an axiological ethic which stands as worthy of consideration in its own right.

The interest of the book lies in its detailed arguments and it is, of course, impossible in a short review to discuss them individually. However, I may say that I found Najder's criticism of views other than his own sometimes superficial. For instance, in criticizing R. M. Hare, he seems to me to hold apart the latter's criteria, prescriptivity and universalisability, inadmissibly. Hare thought particular moral judgments such that reasons can always be worked for them and it is only if we overlook this that we can get away with the suggestion that his prescriptivity amounts to a mere to equating calling something good with praising approvingly at it. Similarly, it is just as wide of the mark to say that the universalisability principle is a moral or psychological, rather than a logical one, or to suggest that Hare overlooked the facts that not all men are similarly situated and that there is such a thing as supererogatory virtue.

What I wonder is whether his account of the cognitive content of particular moral judgments really takes us beyond the view that the latter strike people in any society as odd unless they conform to judgments widely held or traditional in that society. This is a view which proper philosophers can, of course, accommodate quite easily. What has to be shown is that judgments which depart from what is widely held are not illegitimate as moral judgments, but are illegitimate as moral judgments. I doubt if he has shown it.

W. D. Hudson

A moralist's turpitude

The Making of a Saint: The Tragic Comedy of Jean-Jacques Rousseau
by J. H. Huizinga
Hamish Hamilton, £7.95
ISBN 0 241 89275 9

Mr Huizinga appears to have been moved to write this book by his puzzlement at Rousseau's reputation. How could such a man be considered so great and influential a person? This puzzlement extends to Rousseau both as a man and as a writer: as a man because he appears on any superficial reading of his life to be feeble and weak a character, and as a writer because his writings are so full of self-contradictions and inconsistencies that no clear body of thought emerges from them. Despite these facts Rousseau was considered in his own life time and subsequently both a "saint", by which I think Huizinga means an exemplary figure, whose life is idealized and whose relics are revered, and also a great writer.

The body of Huizinga's book is taken up with an account of Rousseau's life which supports this initial adverse view of his character, and presents the course of that life as a tragic-comedy. Rousseau's writings are only briefly and superficially considered in support of the claim that they are so self-contradictory as to have no definite meaning or message. But as to the character of the man, Huizinga does not have much to say and what he says is singularly unconvincing. Because he thinks so little of Rousseau both as man and writer, he cannot think that Rousseau's reputation has any firm foundation. He is content to conclude that this reputation is to a considerable extent the result of a gigantically successful puff, which having got under way in the first place has grown and grown through the reiteration of successive generations of school of successive generations of scholars. The necessity for some such implausible conclusion is a consequence of Huizinga's failure to give adequate attention to Rousseau's writings.

As an attempt at an overall debunking of Rousseau, if this were the author's intention, the book must be considered a failure for the above reasons. But read more narrowly as an account of Rousseau's life in terms of the gap that pretensions and status in the eyes of the public and the moral reality of his character, the book has value. Huizinga is not simply setting out to score moral points against Rousseau to show him up as though he were exposing a scandal, although, in ordinary moral terms, this must be an element in his book. He writes entertainingly and with a light and ironic touch on this subject because he is representing it as a comedy, which also has its tragic side evoking our compassion.

The essence of the tragic-comedy of Rousseau's life lies in the gap between the real and idealized versions of it. The author is particularly perceptive about how the gap entered in the first place and how its growth came to prey on and destroy Rousseau's life and friendships. According to Huizinga, the trouble began with Rousseau's decision to adopt in his *Discourse on the Arts and the Sciences* the public stance of a stern moralist, and with the enthusiastic response that this produced from the reading public. The absurdity of Rousseau's decision consisted in his total unsuitability for such a role. He was an imperceptibly weak and feeble character who could not possibly sustain the demands of a strict moralist's role required of him. But as a result of being type-cast in this role Rousseau had to persuade himself and others that he really was a good person despite his apparent moral failings. He became involved in a heroic effort to justify himself to himself and to his public. This effort of self-justification on the one hand made him even more contemptible and absurd at least to the modern reader, for it involved producing what are transparently hypocritical rationalizations. For the other hand it alienated his friends, who came in increasing numbers to see him as something of a moral



Jean-Jacques Rousseau

monster. Ironically, as Huizinga points out, his suffering at the hands of his former friends only served to increase his stature in the eyes of an ignorant but adulatory reading public as an exemplary moral being.

On these tragic-comic developments Huizinga writes well and perceptively, but the whole account is flawed by his inability to treat seriously Rousseau's moral writings. A deeper understanding of these is essential not only for perceiving Rousseau's importance in intellectual history, but for an illumination of what his moral project for his own life was.

Huizinga dismisses Rousseau's writings in so cavalier a fashion because he claims that Rousseau no sooner adopts a position on one subject than he asserts the opposite of it a few pages later in the same work, or in some other work. He thinks that Rousseau is as weak and unstable in his writings as in his character. One cannot represent him, therefore, as standing for any definite position, or as conveying a definite message. Having myself written a book on Rousseau's moral and political theory, which purports to do this, I am hardly likely to agree with him. It is true that, as Huizinga points out, Rousseau's procedure in his works is very often to develop a radical position on a subject, for example on the evil effects of culture, or on the injustice of inequality, and then to tone down the argument or abandon it altogether in respect of its application to his contemporary world. The argument appears as valid in theory, but not to be applied in practice. If this would cause any disturbance to existing arrangements. Clearly Rousseau had in practice a very unrevolutionary temper.

But this refusal to apply radical principles in practice does not show that Rousseau held no consistent set of theoretical principles. Furthermore, these principles, in their abstract generality, for instance as they are presented in *Emile* and the *Social Contract*, can be interpreted to fit the world, to produce practical conclusions, in different ways. This leaves ambiguities in his principles which he does not mean that he has no coherent principles. If he had argued elsewhere that Rousseau's theoretical position is radically incoherent and absurd, I do not mean that he contradicted himself clearly. I mean that the elements in his theoretical position which he wished to hold together cannot ultimately be asserted together without absurdity.

Any satisfactory account of Rousseau's life must be a cultural and intellectual history, and a satisfactory account of his intellectual life must be a history of his moral project, the problem of freedom and the experience of its own

life correspond so closely that if one wants to understand Rousseau's project for his own moral life, one must relate it to his theoretical work.

Huizinga is on the track of this understanding in his emphasis on the way in which Rousseau seeks always to avoid being bound to obligations to another person, in the sense that the other person has a claim on his behaviour and feelings. To be under constraints or compulsions of such kinds was intolerable to Rousseau. It was not that he never had generous or loving feelings towards others, but that he would insist that such feelings must spring spontaneously from himself. So soon as he experienced the pressure on him arising from the claims of others, his feelings would disappear under the constraint. His position he wanted to justify by that of never having to do anything that he did not feel like doing. It was because of this project, that the belief in the purity and goodness of his heart, which Huizinga shows Rousseau so ridiculously proclaiming through all his moral twaddle, was so necessary to him. Since his project was never to acknowledge a claim by another, and yet to be a moral example to do this, he had to produce the feelings spontaneously that he would not allow another to claim. This project is reflected in Huizinga's account of Rousseau's contemptible theory of gratitude. According to Rousseau, it was not the donor of some gift or benefit to himself who was owed gratitude by Rousseau, an obviously intolerable position, but Rousseau himself who was the beneficiary for allowing himself to be the means of the donor's self-gratification.

Rousseau's project for his life can be seen as an attempt to be autonomous in the sense of always having the source of his actions within himself, and not even partly outside himself in the claims and opinions of others. His aim, however, is not (always) to reject obligations towards others, but to construe these as modes of his own existence not involving dependence on beings outside himself (the does not love the other person as a being other than himself but loves himself in the other). Rousseau's overgrown ego, which Huizinga duly notes, is in this sense part of his moral self-conception. If we are to understand this egoism, we must grasp the central concepts of his theoretical writings, his notions of freedom and dependence as they are developed in the *Discourse on the Origins of Inequality*, *Emile*, and the *Social Contract*. One cannot begin to see Rousseau's importance in Western thought, or to understand his project, until one has grasped these concepts. Mr Huizinga, although he has written a very readable book, does not begin to do this. He does not begin to see Rousseau's importance.

John Charty

Machinations

The Jansenists and the Expulsion of the Jesuits from France, 1763-1765
by Dale Van Kley
Yale University Press, £25
ISBN 0 300 1748 0

The destruction of the Jesuits was one of the most spectacular events in eighteenth-century history. In 1763, it was also one of the most momentous. With it, the Council of Trent's reform of the Jesuits, still secular monarchs brought the authority of the Pope down to earth as it has ever since. The education of the ruling elite throughout the Catholic world was thrown into chaos. Yet for his time it was possible, as it happened, that the Jesuits were as well as they were. The Jesuits were the most resourceful sons of St Ignace who had been founded in the mid-sixteenth century. They were the most pervasive influence of Enlightenment anti-clericalism, and inquiring too closely into the details of precisely how it occurred. Van Kley's book shows how the Jesuits' downfall was the result of leading such assumptions as he

Better informed students of eighteenth-century France have of course long been aware that Jansenism played a far greater role in the Enlightenment than the Jesuits. Van Kley's book shows how the Jesuits dominated the whole process from start to finish. He shows how the Jansenists were, and how through manipulating the process they were able to exercise an influence out of all proportion to their numbers. He also emphasizes the often neglected fact that their hostility to the Jesuits found sympathy in a wide range of government quarters. He shows exactly how, at the moment when the Jansenists had decided to launch a new onslaught on him arising from the claims of others, his feelings would disappear under the constraint. His position he wanted to justify by that of never having to do anything that he did not feel like doing. It was because of this project, that the belief in the purity and goodness of his heart, which Huizinga shows Rousseau so ridiculously proclaiming through all his moral twaddle, was so necessary to him. Since his project was never to acknowledge a claim by another, and yet to be a moral example to do this, he had to produce the feelings spontaneously that he would not allow another to claim. This project is reflected in Huizinga's account of Rousseau's contemptible theory of gratitude. According to Rousseau, it was not the donor of some gift or benefit to himself who was owed gratitude by Rousseau, an obviously intolerable position, but Rousseau himself who was the beneficiary for allowing himself to be the means of the donor's self-gratification.

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William D.

BOOKS

Relieving Spanish deprivation

Readings in Spanish Literature
edited by Anthony Zahares and Barbara Mujica
Oxford University Press, £5.50
ISBN 0 19 501845 1

Readings in Spanish Literature brings together works by 12 authors. Cervantes is represented by his lively *entremés El retablo de las maravillas* and the complexities of Quevedo's thought and expression are conveyed in *El mundo por de dentro*. The sonorous paragraphs of *El héroe* (the only abridged item) introduce the views of Gracian and Calderón's philosophy is paraded before us in the magnificent *El gran teatro del mundo*. In the nineteenth century we find Larra's contrasting articles *El castellano viejo* and *Diez de difuntos* of 1836 as well as Bécquer's *El monje de las damas* accompanied by three rimeras. There are two ironic and gripping short stories by Clarín, *Protesto* and *El forastero*. Some of Unamuno's constant preoccupations are revealed dramatically in *El otro* and Valle-Inclán's liking for the grotesque is illustrated by *La rosa de papel*. The romance

Tierra de Alvar González, while admirable, is perhaps not the best example of Machado's art and attitude. A sinister echo of the past and the present are found in Francisco Ayala's *El inquisidor*. The final item is the previously unpublished play *El bacalao* by José Ruizbal. Each of the works is provided with copious footnotes in English, mainly elucidating linguistic problems and explaining allusions. A brief commentary following each work discusses context, content and meter (nine of these are in Spanish) are superb examples of literary analysis and each is by a different critic.

The policy of presenting complete works rather than excerpts is an admirable one with numerous advantages but it obviously restricts the area of choice for many major authors did not write suitable anthology-length masterpieces. So we find nothing by the prolific Lope and no contribution from Galdós. In the preface the editors inform us that: "The opportunity to read quality literature has been consistently, almost systematically, denied to undergraduates

taking Spanish as their foreign language." This rather pessimistic view of education surely cannot be universally applicable. The present collection is, therefore, intended to give such literature to the deprived undergraduate and to provide "exposure to quality criticism" and linguistic practice "early in his course of study". While accepting the editors' contention that presenting a student with a challenge prevents his work from becoming dreary, it is surely equally true that too many difficulties can do all but the most enthusiastic. The linguistic standard and the profound thematic content found here would be fairly taxing for many students of Spanish. Numerous words could be omitted from the vast glossary. If a student needs help with *humano*, *práximo* and *robar* he is not ready for Quixote and colleagues. One hopes that none of the Golden Age archaisms (and those of Valle-Inclán) will be absorbed along with the beneficial linguistic examples. This would be the perfect reader for the perfect student and the rest of us will certainly receive stimulation and help from it.

Jennifer Lowe

Theological tradition

Theology and Change: Essays in the History of Theology
edited by Ronald H. Preston
SCM Press, £4.50
ISBN 0 334 01640 1

The sudden death of Alan Richardson in February meant that this series of essays from friends and colleagues which had been intended as a congratulatory *Festschrift*, had to be turned into a memorial volume. Alan Richardson and his colleagues made of the department of theology in Nottingham something ecumenical and recognizably Anglican, but where theological teaching and pastoral concern for students went together. At his heart was a wide learning, common sense and kindness were blended. This volume reflects Richardson's interests and his influence. The introductory essay by Professor Ronald Preston is a reminder of the whole history and organization. The result of this process was a sweeping condemnation, on grounds of state security which the government could not safely repudiate. It was not the Pope and the Jesuits but the Anglican teaching and pastoral concern for students went together. At his heart was a wide learning, common sense and kindness were blended. 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BOOKS

Unintelligible theories

Educational Theory and the Preparation of Teachers by John Wilson. National Foundation for Educational Research, £3.75 ISBN 0 85633 080 9

What is wrong with educational theory, says John Wilson, is not that it is irrelevant to practice, but that it is, for the most part, bad theory. Most of the literature is "hopelessly muddled and often unintelligible, riddled with doubtful assumptions and jargon-defended theories; the product, it might appear, more of fashion and fantasy than of any real concern for truth". But this does not mean that there is no proper subject-matter, only that "we are not clear about what it is or how to do it".

Wilson's starting-point is to examine what is meant by "education". In order to answer the question—what ought we to be studying under this heading, Books like Tibble's *The Study of Education*, he says, far from establishing coherence only serve to show the variety of what may go on under this umbrella. To study education, according to Wilson, is to be centrally concerned with "human beings learning things or increasing their knowledge and rationality"; there is also the implication that what is learnt has importance for the learners as people, and that it is learnt in a way that does not bypass their reason. With this as the central focus there would have to be some drastic pruning of educational theory, social class, for instance, or the study of sub-rational behaviour, would appear only as "background studies". It would also give a new and more specifically "educational" twist to topics like discipline, with the emphasis firmly on how pupils come to understand ideas such as authority and rules. The argument, then, is that one can only engage seriously in educational theory if one keeps firmly in mind the pupil as a learner. The crucial question, Wilson insists, is "What is to be, or what are we going to count as, well-disciplined, a serious student of science, a sound judge of art, educated in morality, 'autonomous', 'creative', and so on?" Wilson suspects that generalized learning theory is unlikely to help us answer these questions since it all depends on what is being learned.

To start developing a more satisfactory framework for educational theory Wilson proposes the setting-up of a small group of academics to tackle what he calls "the hard work of effective taxonomy". He seems to envisage the establishment of some-

thing like a Centre for the Study of the Study of Education. Our usual way of dealing with educational theory is to set up groups which try to be representative, to work democratically, and to issue conclusions in consensus; he cites T. Hollins *et al.* *The Objectives of Teacher Education*, as an example of this, and dryly comments that it is an appropriate procedure in a field where no one has any more ideas of what to do than anyone else. By contrast, his suggestion is for a group of first-rate scholars, functioning unashamedly as experts, to devote themselves wholeheartedly to making sense of education as a subject. His case is not that educational theory has been tried and found wanting (Bloom's *Taxonomy of Educational Objectives* is dismissed as being notoriously incompetent); but that we have yet to try.

Turning to the preparation of teachers, he insists that the proper starting point is to consider not what society requires, not what the general consensus is, not what is politically viable, but what it is to be a teacher. At the heart of teacher-education is the task of getting them to take seriously "certain central aspects of education and learning", which appear to be, roughly, subjects, learning, and people. It might be possible, he says, to investigate these matters at a level beyond that of common sense, though what matters most to much getting "the right mixture of theoretical knowledge" but adopting "the right kind of intellectual posture". But being a teacher is not just a matter of the intellect, nor is it just a craft, to be acquired by practice; it also has to do with what one is like as a person. One necessary prerequisite of being a teacher, therefore, according to Wilson, is "discovering what sort of person one is". This seems to require the deliberate fostering of personal relationships as part of the preparation of teachers.

Few writers are as lucid as John Wilson, yet it is possible that this book will be welcomed by the wrong people for the wrong reasons. Those who love to criticize the intellectual integrity of educational studies will see on Wilson's rank and file position that much of it is "extremely questionable and perhaps largely a waste of time"; while his remarks about "personal understanding" and "intimate relationships" will give encouragement to those who would like to turn teacher education into a kind of psychotherapy. But Wilson's own emphasis is clear: it is time we stopped bewailing the inadequacy of educational theory and got down to a serious, long-term, cooperative study of it.

John Eawaker

Atlantic crossing

The College Student and Higher Education Policy by Scott C. Veyen. The Carnegie Foundation for the Advancement of Teaching (available from the National Student Educational Fund, 2000 P Street, NW, Suite 305, Washington, DC 20036) \$3.00

For serious students of American higher education there is no real substitute for the twenty odd reports of the Carnegie Commission and the more than fifty studies published by the commission. For those with less time or stamina this book provides a very useful summary of the main findings and recommendations of the commission which

ranged far and wide over higher education in the United States between 1967 and 1973 under its chairman, Dr. Clark Kerr.

As the title implies, it is aimed at American college students—but incidentally is placed at the right level of detail and sophistication for foreign observers who are interested but not immersed in the progress of higher education on the other side of the Atlantic. It is a clear, readable, and intelligent account of the work of the commission, and so provides a valuable introduction to the major issues in American higher education—issues with which slowly but surely we are becoming more familiar in Britain.

Peter Scott

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Standard deviation

Deviance in Classrooms by Donald H. Hartree, Stephen B. Heister and Frank J. Moller. Routledge & Kegan Paul, £5.50 ISBN 0 7100 8275 4

The social scientist working in the field of education is in a difficult position. He finds himself between the "devil" of his subject discipline with its terminology elaborated by the technical or theoretical complexity, and the "deep blue sea" of practising teachers. The problems inherent in this position need to be recognized, and when authors declare their intention to write for both audiences they need all the help and encouragement that a critical and disappointed colleague can muster. Education badly needs to incorporate the perspectives offered by the social sciences.

Deviance in Classrooms is not about criminal deviance or juvenile delinquency. It is about paying attention and not paying attention; about cheating and not cheating; about listening and not listening; and the many other routine incidents of the classroom. It is therefore about the everyday concerns of the practising teacher. Unfortunately, these promising ingredients do not flourish beyond the early pages and the few important insights that emerge are buried in trivia and transcripts from tape recordings. The authors appear to feel that reporting what teachers say is a substitute for design and analysis within a study, and that keeping the tenets of the symbolic interactionist approach is a substitute for creative thinking.

The authors see themselves breaking new ground by applying labelling theory to deviance within classrooms and using the theoretical approaches of symbolic interactionism and phenomenology. They begin in the well-tried manner by differentiating this "new sociology" practised by phenomenologists and the "old sociology" practised by those labelled positivists, and then plunge the reader (hopefully a teacher) into an arid discussion of sociological stereotypes, from which the book does not recover. I use the term arid because the methodological and theoretical strait-jacket developed in the first chapter is in the main responsible for the insensitive and unimaginative fieldwork and the failure to develop some of the promising avenues of inquiry they began to uncover. In many cases they do not develop them because this would be positivistic, and they are not positivists.

The study begins with some important truisms in sociology. Erikson is quoted to illustrate that "Deviance is not a property inherent in certain forms of behaviour; it is a property conferred upon these forms by the audiences which direct or indirectly witness them." The authors go further than this widely accepted notion to take up the position of Philipson and Roche: "the clarification of the concept of social deviance itself. A clarification would require a statement of the interpretive rules according to which sociologists and the members [teachers and pupils in this case] they study designate

an act, event, or member as deviant."

It is these interpretive rules that the researchers wished to uncover, and they concentrated on them to the exclusion of all other questions and approaches. They observed classes in two secondary schools—and questioned teachers about the interchanges that took place in an effort to reconstruct the unwritten rules of the classroom. It will come as no surprise to the reader that the rules governing the commonplace, everyday happenings of the classroom are commonsense, taken for granted rules with which most of us are familiar. It should not require a hundred pages for the authors to develop a sensible enough clarification of rules to tell us, for example, that teacher-pupil relationships include the rule of obedience; the rule of good manners; the rule of permission seeking, etc. A classic illustration that is not indeed ever used by the authors to code events because that is what positivists do! How, I wonder, was the classification arrived at, without coding observed events and being positivistic?

The book splutters into life in the later chapters, "The Typing of Deviant Pupils" and "Deviance to Deviance" but the overall impression is of an opportunity lost. If sociologists are to pursue the task of creating a dialogue with teachers, they need to combine the strengths of traditional sociology with the strengths of the new, and impose limitations on their thinking.

Colin Lacey



Farmer Giles and his wife put their daughter through her paces for a prospective husband. Gillian's career, the parvenu farmer was done in 1809. *From Awakening Giant: Britain in The Industrial Revolution*, by E. R. Chamberlin, published by Batsford at £5.75.

Growing needs of growing numbers

The Child's Generation by Jean Packman. Blackwell, £5.50 and £2.65 ISBN 0 631 36590 8 and 16600 9

This excellent book covers an account of the development, over some twenty years, of social policy behind the services for deprived children as it was envisaged in the 1948 Report of 1948 and in the 1970 Committee of 1972. It ends with the difficulties highlighted by the Marfo Colwell case in 1974, and includes, in the course of the history, the dissolution of the Children's Departments which were swallowed up in the social services reorganization of 1970.

Changes in child care policy over the period have evolved in a pragmatic and largely untheoretical manner, largely inspired by a body of pioneering and dedicated social workers, and their equally dedicated colleagues of locally elected representatives. It is described by the author as a "series of compromises" and "a series of compromises" and "a series of compromises".

government and had no idea that as members of a committee we were replacing old Poor Law Standards and people who thought these standards were good enough or "kinds of children" (the staff who always involved committee members so deeply in their regard themselves as having a real part to play and to feel wholly committed).

The evolution of policy by committee, and staff is well illustrated in the book by material taken from the records of the two County Children's Departments of Devon and Oxfordshire. Dr. Packman does not provide in itself a definition of that social work is all about. The child care service in 1948 had interesting parallels with the social services of 1974. It is clear that the new service has not been worked out, and the new service is still in the process of being worked out. This thoughtful analysis raises many important questions for child care in the future. Among them, will the vital personal contact which has played so important a part in determining the direction of change, still remain within the great structure of the new organized local authorities?

Jean Heywood

Plastic earth

Processes in Physical and Human Geography: Bristol Essays edited by Ronald Peel, Michael Chisholm and Peter Haggett. Heinemann Educational, £8.25 ISBN 0 435 35625 9

Geography as a university discipline is still quite young, and this volume from the Bristol department follows the pattern set by Liverpool (1967) and Aberystwyth (1968) for their fiftieth anniversaries. It has been edited by its three professors. All 20 authors have been members of the staff during the years since 1957 when Professor Ronald Peel came to the department, and 16 of them are teaching there today.

Departmental *Festschriften* almost inevitably lack a theme, but the editors have made a commendable, even if not wholly successful, effort to group the papers under general headings. They suggest that common to them all "is an emphasis on the processes that mould the surface of the Earth and its man-made environments, whether these processes can be directly observed and measured, or can only be examined by indirect and inferential means". They also note that a feature that recurs is the modelling of these processes, whether in rigorous mathematical terms, or by the construction of conceptual frameworks for analysis.

A very wide range of topics representing the departmental research of recent years, is covered. At one extreme is an almost traditional introductory essay on the changing role of Bristol in the development of south-west England. At the other extreme is a study of class structure in a capitalist society and the theory of residential differentiation. In between there are essays on statistical approaches towards physical hydrology in large catchments, on the relationship between microclimatology and the design of Bristol's bridges, a very lengthy account of the policy behind housing improvement in

Bristol, and a consideration of values and political geography. With such variety, a general comment is scarcely possible unless it is that the younger generation usually writes less intelligibly than its seniors and adopts more readily the jargon that, unfortunately, spoils so much writing in the social sciences and often very effectively obscures the points that authors are trying to establish.

Is there a distinctive "Bristol view" of geography? The editors suggest that, should such exist, it should be left to reviewers and critics to decide. This volume hardly suggests to me that there is much thought about the unity of the subject among Bristol geographers, but there has undoubtedly been a particular approach to geography in Bristol during recent years. Whether that approach is necessarily the most important is, of course, a matter of debate among geographers. Is there a danger of the subject losing its way if it tackles so many themes from so many different standpoints? Are geographers better qualified than, say, engineers or biologists, or sociologists to investigate some of the topics discussed in this volume? And how many would agree with the writer who clearly regards as a major theme in geographical research "the study of the impact of local government policies"?

Those who look at geography from the outside, whether sympathetically or critically, are bound to seek the distinctive features of the geographer's approach and the focus and objective of modern geography. But all who study Bristol Essays will be impressed by the erudition of the authors even if they are sometimes slightly puzzled by what they read. Perhaps they will also wonder whether the use of sophisticated mathematical models helps or hinders. The volume will be a permanent asset to the department with an interesting history, marked by fundamental changes in the past two decades, and one that has had a major impact on the progress of geography during that period.

Robert W. Steel

Pedologists dig

Soil Science and Archaeology by Susan Limbrey. Academic Press, £8.40 ISBN 0 12 7854 77 0

It is almost 20 years since Ian Corry's pioneer book, *Soils for the Archaeologist*, was published. With the publication now of Susan Limbrey's *Soil Science and Archaeology* we can gain some impression of the progress made since then by the small number of archaeologists, soil scientists and others interested in early environments and their history. It is clear that collaboration in such interdisciplinary fashion has led to substantial advances in our understanding of soils in various parts of the world, particularly in southern Britain.

Dr Limbrey's book is designed for a varied audience and so covers a wide range of topics at different levels. The first part deals in considerable detail with soil materials and processes. This is basic information, found in most standard soil texts, although some topics of archaeological interest are briefly discussed, such as the problem of soil organic matter. The second part of the book with discussion of the history and classification of soils, of the humid temperate zone. Emphasis is placed on the need for interdisciplinary work, rather than interpretative section drawing, for example, could have been greatly strengthened by the inclusion of clear illustrations upon the archaeological chapter on reclaimed and man-made soils. Such soils are the most obvious results of human activity. However, as Dr Limbrey makes clear, most of the world's soils are the result of both human activity and natural processes.

Bruce Proffitt

BOOKS

Commuters

Quantitative Analysis for Planning Decisions by K. Howard. Macdonald & Evans, £5.00 and £3.50 ISBN 0 7121 1701 6 and 1702 4

Progress in Planning, volume 3, part 2: The Journey to Work: A Behavioural Analysis by E. N. O'Farrell and J. Markham edited by D. Diamond and J. B. McLoughlin. Pergamon, £3.40 ISBN 0 08 018083 3

Despite the appearance of the word "quantitative" in the title, none of these books, they have nothing in common. Howard's book is about the use of various, mainly operational research techniques, largely in the field of company management; planning to him seems to mean the same as decision-making. O'Farrell and Markham are describing a research study they carried out on people's methods of travelling to work in Dublin. The series of papers in this volume is concerned with planning of land-use, transport and recreation. The analysis that they carry out would be better described as statistical or an analysis of modal choice; they did not investigate behaviour on the journey to work. Moreover, since the methods used are largely conventional, their inclusion in the series *Progress in Planning* seems misleading.

Potentially the most interesting finding in O'Farrell and Markham's study is their value of in-vehicle time for Dublin commuters (that is, the maximum amount commuters are willing to pay to save 1 unit of time). This comes out at nearly £1.00 an hour, 86 per cent of the 1971 wage rate, which is higher than any other recent study using similar methodology in British cities has found. Do the Irish thus bely their reputation for a more leisurely pace of life? Unfortunately not, for the conclusion is that the value of time of the marginal man will be high; if it is low, then the marginal purchaser will have a low valuation. So measures for different cities cannot be compared without also comparing the corresponding numbers of time savings purchasers in each.

O'Farrell and Markham were not the first to make this error, but it is unfortunate that they have perpetuated it. Howard's book is aimed at practising managers and students of management. It would infuriate most practising managers that I know. I do not teach management, but I do not think it need here. But it seems to me that for people with any ability the book is too naive about the nature of management problems; and the descriptions of techniques, while reasonably clear and well presented, would have been much more useful and convincing with real illustrations of their use.

Tony Flowerdew

Reviewers

John Charvet lectures in government at the London School of Economics and is the author of *The Social Problem in the Philosophy of Rousseau*. Donald Cross is senior lecturer in town and country planning at the University of Manchester. William Doyle, lecturer in history at the University of York, is author of *The Parliament of Bordeaux and the End of the Old Regime*. Joan Heywood was a former children's officer in Rochdale and has written *Children in Care* and is reader in the history of education at the University of Manchester. W. D. Hudson is editor of *New Studies in Ethics* and is reader in moral philosophy at the University of Exeter. Colin Lacey, author of *Hightown Grammar*, is a schoolmaster and a senior professor of education at the University of Sussex. Jennifer Lowe lectures in Spanish at the University of Edinburgh. Bruce Proffitt is professor of geography at the University of St. Andrews.

Passing the time

Progress in Planning, volume 4, part 1: Urban Networks: The Structure of Activity Patterns by I. Cullen and V. Godson. Pergamon, £4.15 ISBN 0 08 018768 4

Evaluation in the Planning Process: Urban and Regional Planning Series, volume 10 by N. Lichfield, P. Kettle and M. Whitbread. Pergamon, £7.50 and £5.50 ISBN 0 08 017843 X and 0182437

These two studies report the results of research sponsored by the Centre for Environmental Studies and the Social Science Research Council. Both studies are concerned with aspects of the broad field of environmental planning, but while Cullen and Godson's study of the activity patterns of a group of staff and students at a college of London University is an attempt to understand how individuals organize their lives in time and space day by day, Professor Lichfield and his co-authors have looked more widely at the procedural problems of how to make by-laws, and how to plan for environmental change in some defined sense "best".

The diary or time-budget technique used by Cullen and Godson allows very detailed data to be assembled about the nature of activities in relation to the time spent on them and the places in which they are conducted. The difficulty with this type of study is how to make a conceptual framework for analysis which deals with the many factors influencing behaviour in space and time and the complex interdependencies between them. The authors start with a model of the individual's day as a path through time in which certain activities are fixed in one or both dimensions and others are flexible to varying degrees. They elaborate this model by introducing ideas of the individual's priorities, degree of flexibility (in terms of "commitment" and time and space fixity) and degree of scheduling. Their hope was that the research would

"isolate . . . behaviour which demonstrates recurrent patterns", however, their results cannot be called promising. Some of their main conclusions are: "Large group, formal activities stood out time and again as the most important structuring episodes in the day." "Apparently, the most flexible portions of time are those during which people are basically just killing time, when things 'just happen'."

Faced with such conclusions one must ask whether this type of micro-study of human behaviour either adds to our understanding of how cities work or to our capabilities to initiate what is perceived as desirable change. None the less, the authors propose to develop their work by applying the same techniques to a different socioeconomic group whose daily activities are more constrained by the circumstances of their lives. Possibly comparisons of the activity patterns of different socioeconomic groups will produce more encouraging results.

Lichfield, Kettle and Whitbread's book is essentially a review of the concept of evaluation in a planning process. Part one examines theory and method and part two looks at the evaluation practice of a number of recent planning exercises comparatively. This combination of procedural theory and case studies is valuable for until very recently there has been little attempt to test the claims made for planning as a problem-solving method against the results of the recommendations made in part three for improving the methods of planning exercises are therefore well based on both procedural ideas and empirical investigation of practice. The whole tone of the book is modest. The very real difficulties of the practical framework within which decision-making takes place, the difficulty of dealing with equity considerations and the necessity of regarding evaluation as a learning process are all emphasized.

Donald Cross

How it has evolved

Geography in Education by Norman J. Graves. Heinemann Educational, £5.50 and £2.25 ISBN 0 435 35310 1 and 35311 8

This is not a book for teachers in search of advice on how to use visual aids in the geography lesson or how to plan fieldwork—they are well catered for. But for the teacher, or intending teacher, who wants to be a true professional, this model by Norman Graves will seem the ideal. It is a book which gives a good idea of the evolution of the subject and its place in the school curriculum, this will be a valuable reference book.

The material was originally developed for courses at the University

of London Institute of Education. The first part reviews the development of geography as an academic study and its varying fortunes as a school subject.

The rest of the book considers geography in the structure of knowledge, aims and objectives, curriculum theory and development, and the growth of perception and conceptualization. It ends with chapters on evaluation and Graves' conclusions and personal perspectives, in which he expresses some of his own preferences.

This clear and carefully written book, with its extensive bibliography, will provide a starting-point for exploring the place of geography in education.

A. R. Cartwright

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THE PROFESSIONS

Two important titles dealing with the media have just been published

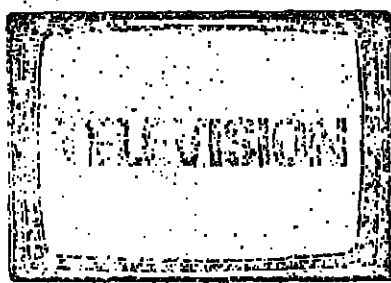
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Broadcasting described from preparation to transmission, £3.95

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Newton Abbot, Devon



Familiarity breeds communication

Michael Clarke

Most universities and polytechnics in Britain now have some kind of media service unit or audio-visual centre. In such places closed-circuit television is usually considered as one technique in a range of communication methods, taking its place with film, tape-slide and sound recording.

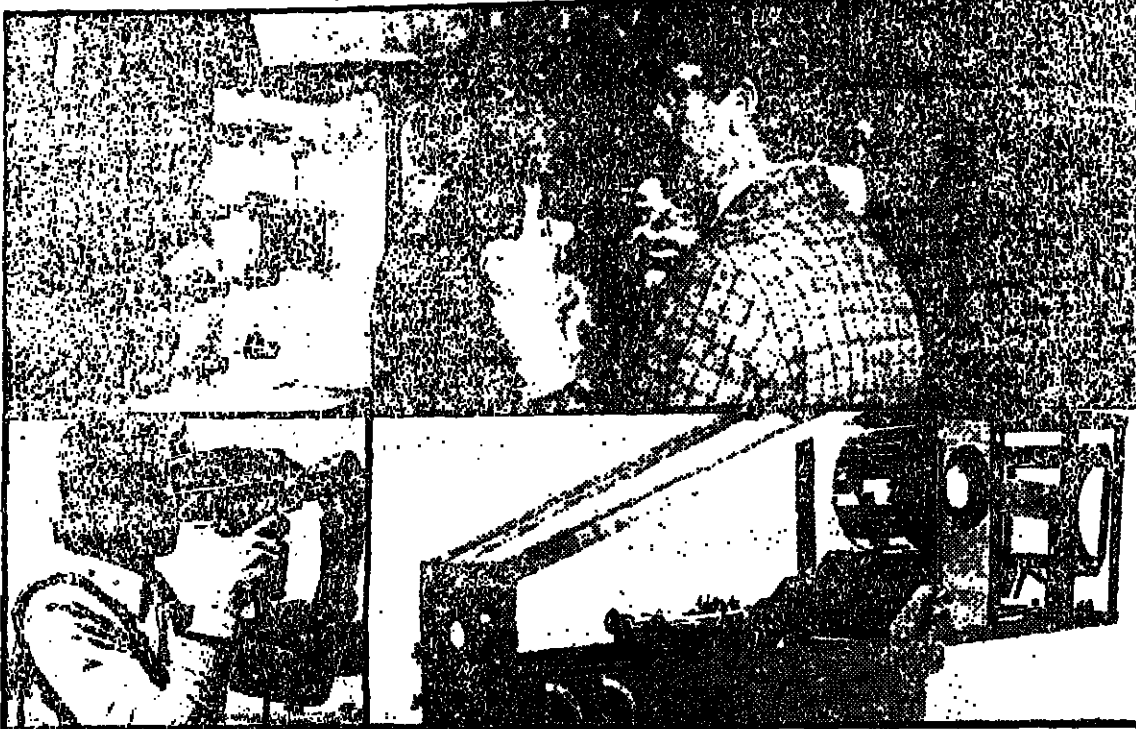
But its use has expanded far beyond the audio-visual centres, and television equipment is now a familiar item of the departmental inventory in many disciplines. Indeed, it bids fair to rival cinema film not just as a technique of recorded observation but as a form of communication with its own idiom, style and advantages.

Sales of closed-circuit television equipment have held up well in a period of growing austerity. One manufacturer, whose products are far from being the cheapest, tells me that he has sold 1,500 video-recorders to institutions of higher education, and the total sales of recorders of all makes and prices must by now be many thousands.

The number of cameras sold, and of switching devices enabling two or more cameras to be used in harmony, would be more difficult to discover. But again there is no doubt that there are hundreds of television cameras in individual departments and in production centres of universities and polytechnics.

Why this boom? Quite simply, television has changed radically from the time a decade ago, when the University Grants Committee set up its "educational technology" sub-committee. Then, television equipment was heavy, bulky, inflexible, very expensive and thought to be usable only by specialists. But in the last 10 years, closed-circuit television has become very much better in quality, lighter, and cheaper with every year that passes.

Attitudes have changed, too: television is now widely regarded as a flexible medium, forgiving in its technical demands, cheap, time-



The camera has come a long way since Logie Baird's early studio demonstrations (top): 1932 version (bottom right) and today's (bottom left).

saving by concurrent use of several cameras, affording instant replay, a "cut" technique that allows scope for the beholder's share and does not involve too hectoring a flow of information.

When, in the mid-1960s, the UGC nominated some universities as "high-activity centres" for television, financing them to acquire immensely expensive and labour-intensive broadcast equipment, this automatically challenged the remaining universities and later the polytechnics and colleges. They developed with the help of manufacturers a much cheaper intermediate technology to the point where acceptable images could be produced and adequately copied or networked at relatively low cost.

It is hard to believe that this result was crafted by the UGC's committee; but cumbersome and sensitive broadcast-type equipment has now been shown to be quite unnecessary for most intra-campus purposes, and probably needless in the future for multiple copying or broadcasting owing to developments such as electronic editing and time-base correction.

Already, and more and more inexpensively, the television images produced from low-cost cameras and recorders can be edited, copied and broadcast in competition with images produced by equipment costing a hundred times as much. The advantages in higher education will be enormous.

However, the prospect is not uniformly bright. The key to image quality in a closed-circuit television system is not primarily the lens of the camera but the electronic and electro-mechanical stability of the video-recorder. The quality of these machines has improved vastly through the development programmes of several manufacturers, to the point where a half-inch monochrome video-recorder of excellent quality can now be purchased more cheaply than many 25-mm film projectors.

But unfortunately, no matter how good the visual quality for the price, the manufacturers have failed to provide one feature that film has long possessed: compatibility. Any 16mm film can be played on any 16mm projector but a television recorder cannot be played on an Ampex recorder, and a Philips-type video-cassette cannot be played on a Sony cassette machine.

Certain types of recorder are now said to be compatible, and purchasers of recent versions of video-cassette equipment can feel fairly confident that their machines will replay cassettes of the same type recorded elsewhere. But this is only a recent development and both open-reel and cassette recording demand high-quality "mastering" equipment if copies are to be genuinely compatible and of tolerable quality.

The use of television recordings has developed so quickly that the manufacturers have been left behind. The University of London, with over 50 institutions with various sorts of video-recorders purchased long ago, has had to set up a special copying centre, in which copies of an original recording can be made on any of eight different types of video-recorder. In addition the Council for Educational Technology has stimulated four institutions (London, Heriot-Watt and Birmingham Universities and Plymouth Polytechnic) to pioneer a national copying service whereby recordings made on one format can be copied on others.

This problem of compatibility might appear to be an impediment to the development of recorded television as a publishing medium; but, surprisingly, exchange of programmes between universities or polytechnics has not yet developed on any large scale.

There are exceptions: some universities send out hundreds of programmes a year to other institu-

tions, and this trade occurs wherever the recordings deal with new or unusual skills or areas of inquiry, or where they meet an instructional need by a systematically planned package, often backed up by print material for further study. In general, however, CCTV has settled down as an informal in-house tool.

As such, monochrome television is now finding uses unimaginable by the educational planners of the early 1960s: for simulation, role-playing, self-evaluation as teacher, preacher, advocate or actor; for self-instruction in techniques both mental and manual; as an informal recorder of public and academic events; as a formal presenter of sequences of argument by cogent graphics and elegant animation.

But what about colour? Perhaps CCTV has spread so widely because of its very monochrome nature, which mediates the real world through geometry and tonality. Will the coloured image not make us all more critical, less capable of suspending disbelief?

It will certainly cost a lot of money to re-equip universities and polytechnics with colour cameras, recorders and monitors—and in the first place this sort of investment is likely to be confined to the central audio-visual units. The small departmental television system, except, perhaps, in medical education, is not likely to be "coloured" in the next few years. The more so, since low-cost colour at present is unpleasing and unfaithful.

But in the end, perhaps in the late 1980s, television technology will catch up again and colour television will become what black and white already is—a form of communication which need not be confined to specialists.

Michael Clarke is director of the University of London Audio-Visual Centre.

Brainwave to air waves in three years

R. H. Bradley

Electronics is perhaps the most rapidly expanding of all technologies and when a new development reaches the market many of its components will already be obsolete. Television engineering, a specialised section of electronics, is today increasingly associated with computer technology, as digital control logic and digitalization of the television signal are developed.

In educational close circuit television it can take three years from the laboratory development of a new device to its introduction in the United States and Japanese markets, and perhaps a further six years before a European version is available. Technical progress can be considered under five headings: cameras; recording techniques; editing; distribution systems; and display devices.

TV cameras have steadily become smaller and more reliable. Miniaturization and integrated circuitry have reduced size and weight, and improved signal processing. Optical systems have remained remarkably largely determined by objective tube size and sensitivity but less turrets have almost disappeared in favour of zoom lenses.

Since camera operators prefer the smooth movement of a heavy camera on a good mount, further miniaturization of studio cameras is unlikely. For education, lighter, more mobile cameras are now available and further progress may be achieved by developing flat plate micro-arrays which would replace the vacuum tube by digital scanning techniques.

Recording will probably continue to be done by mechanical scanning of magnetic tape, which has gradually improved over the years. The newer "high energy" videotape is further development, but large users would welcome more consistency between batches. Alternative magnetic recording systems using digital signals are being widely investigated, but these are unlikely to be found in educational CCTV for many years yet.

Videotape editing is still a major problem for the small-budget television maker. Many rival editing aids are on the market, but the fundamental problems of colour television signals appear to lead only to expensive solutions. The best answer may be to create "editing centres" shared by several institutions. Here expensive signal correction devices can be automated techniques can be pooled among a number of users.

Distribution of the TV signal always provokes heated discussion. Open broadcasting is not available to most educational units, but we should not forget that the fourth UHF channel has not yet been allocated, and that Band VI (12 GHz) could also be used.

Cable distribution systems have similar time-lagging problems and are expensive. But as videotape and video-cassette recorders become steadily cheaper we are likely to see a move towards video-disc systems, with all the flexibility of use that they provide. Video-discs are thought by many to have a great future but in higher education, with the high specific quality of many programmes and low copy costs, the cost of producing the master video-disc may not be justified.

Finally, we come to display devices. The standard television tube—an electron gun bombarding phosphors in a vacuum—has remained basically unchanged, despite years of work to find an alternative technique. The physical size of the television display is limited by the dimensions of doors in buildings and by the constraints of glass manufacture.

Large flat colour television screens are still a distant prospect, despite intensive work on rotating mirrors, laser scanning, light emitting diodes, and low thermal emittance, and for large projection systems remain unchallenged.

R. H. Bradley is chief engineer of the University of London Audio-Visual Centre.



Study what you watch—obviously

Stuart Hood

The arguments for including the study of television, in one guise or another, at all levels of the educational system seem obvious.

It is through this medium that most young children obtain the bulk of their entertainment, and a good deal of information. Throughout childhood the graph of television viewing rises, to reach at or around the age of 12 an absolute peak. At this stage the boy or girl will watch television more constantly and more frequently than at any other period in life, for this is the time when the child watches not only programmes aimed deliberately at a young audience but those intended for adults as well.

It is commonsense to suggest that the products offered by a cultural medium of such pervasiveness and such pervasiveness should be discussed from an early age if only at the simple level of content.

It is not necessary to subscribe to any McLuhanite view of the role of the new medium in our society or to believe that we are entering an age when the picture will replace the written word, to be persuaded that television further engages the attention of the young, which is such a potent instrument for socializing the viewer, and which is one of the chief bearers of ideology in our society, should be dealt with in the curriculum. It is more important for a child to develop critical judgments of television than to exercise the same critical faculties on prose or verse.

The argument for teaching about television—those phrases which require definition—rests on other grounds too. One of these is connected with the nature of the medium—or rather with the conventions that at present govern its use. Chief among these is the convention which demands that the image on the television screen should appear to reach it free from mediation; should be as unquestioned and unproblematic as any other household service—gas, water or electricity—and as easily switched on or off.

One of the aims of a good, professional television production is to eliminate from the screen any device suggesting that the picture and accompanying sound are the result of a whole chain of editorial and technical interventions. Hence the dismay when some accident in transmission threatens to reveal the mechanisms too clearly. The immediacy of the television signal is of crucial importance to the broadcaster, for in it lies much of the potency of the audio-visual message the medium conveys.

If the development in school children of a critical attitude towards the content of television programmes is desirable, so too is the development of an understanding of the processes which determine this and the form in which it is presented. At a simple level this would involve discussion of what happens in a television studio, and of some of the basic techniques, which are applicable both to film and to video: the technique of editing pictures to present a coherent story; and the technique of interviewing.

Such knowledge is closely related to the ability to "read" the television screen, to be aware of what is happening in, say, a newscast and to read the codes in which the information is conveyed.

Consideration of the reasons why television should appear immediate leads to an examination of the processes of editorial control, of the constraints, political and economic, under which the professional makers operate, and of the nature and function of television organizations.

It may be objected that these—these areas of study—outlined above are in a degree outside the conventional studies such as some polytechnics have either launched

or are planning. This is true, just as it is true that the subject involved can be dealt with at many levels and in terms within the grasp of students and schoolchildren of different ages.

The mechanisms of television broadcasting can be as well illustrated with the cardboard model of a studio and miniature cameras, the handling of a sports outside broadcast, as fruitfully discussed with miniature outside broadcasts and a table football outfit, as by formal analysis of the codes of television productions or of the role of the gatekeepers along the chain of command.

What is required is that an awareness of the important topics raised by an examination of television should filter down through the educational system and that television be dealt with in its own right and not merely as an adjunct to some other subject such as English.

Fortunately there are signs that this process is beginning to be favoured—in those schools lucky enough to have them—by the availability of television cameras which the students can operate themselves.

The difficulties facing those wishing to expand and extend communications studies, in one form or another, through the curricula, vary. There is the opposition, also encountered by film studies, which maintains that what the young actively enjoy is not a proper subject of serious study. Allied to this view is the feeling that television and film belong in a child's "free time" and are not relevant to what goes on in school.



Girls from Kidbrooke School watch a programme from the school's own studio.

There is the feeling, which finds expression at a higher level in criticism of communication studies at polytechnic level on the grounds that such studies are a hotch-potch drawn from widely differing disciplines; that they provide an easy option to teachers and students who are unwilling to tackle more serious matters.

There is, unfortunately, a wide degree of ignorance about communications and about television in particular—an ignorance which is by no means confined to the teaching profession but extends to those who would otherwise claim to be widely knowledgeable. (It is astonishing

how many otherwise well-informed people are ignorant of the difference between a film and a videotape recording.) This ignorance exists partly because professionals have tended to keep the mysteries of their craft to themselves and only in the recent past have publicly discussed such topics as the nature of organizations or the codes they operate in making programmes.

The resultant gap is beginning to be filled by such publications as the *British Film Institute's Television Monographs*, which, although unequal in quality, are a serious attempt to discuss in accessible language some of the crucial questions relating to organizational

structures, editorial control and so on. But there are other gaps to be filled. There is a need for teachers' material on communications and television, just as there is for material suited to students of all ages.

Television occupies a central position in the popular culture of our society. As such it deserves study and critical attention. Audiences, in a sense, get the television they deserve. The formation of a critical audience must begin in the schools.

Stuart Hood is professor of film and television at the Royal College of Art.



How many of these ways could you use the Philips Television Recorder?

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- 5 Playing educational cassettes supplied by specialist programme companies.
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- 8 Using with a simple TV camera to:
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 - b. let an actor or speech-maker see and criticise his own performance. Record the final performance.
 - c. record interviews with people for replay at times when they are unavailable.
 - d. record experiments, study TV direction and production.

The Philips Television Recorder is already being widely used throughout the educational world. For full details of the Television Recorder and a free Audio Visual Guide write to Philips Electrical Ltd, Dept. S.P., Century House, Shaftesbury Avenue, London WC2H 8AS.

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Sales effort shifts to home user

Patricia Santinelli

In spite of increased sales in the higher education sector, Sony (UK) Ltd have moved their sales emphasis away from education towards commerce.

In 1969, a very high proportion of our sales were in the education market rather than in the commercial area, now it is the other way round," Mr Trevor McArthur, commercial and industrial division manager said.

Mr McArthur pointed out that two factors had influenced this decision. The first was the price difference between Sony and Philips equipment, the latter being definitely cheaper and therefore more attractive to the education sector.

For example, the N1501 which has replaced the N1500 colour videocassette recorder retails at around £570, whilst the Sony

U-matic colour VCR costs in the region of £825.

Secondly Sony introduced colour two years later than Philips who were able to take the lead in the education market with the N1500, originally designed as a home video-cassette recorder.

Design differences between the N1501 and the Sony U-matic are likely to have affected their appeal to different markets. The U-matic, for example, uses a 3 inch tape which allows for two audio tracks which can be used either independently for bilingual programmes or simultaneously for stereo sound.

The N1501, however, uses a 1 inch tape with only one audio track. But the Philips N1501 is fitted with both a timer and timer which allow programmes to be recorded in the absence of an operator, a facility not available on the U-matic.

On the other hand, the U-matic is adapted to replay tapes recorded both in the PAL system for Britain and most of Europe, and NTSC, the standard colour system for the United States and Japan.

"If we are to keep these particular aspects in design as well as maintain the quality and reliability of our systems, there is no possibility of lowering our prices," Mr

division assistant manager explained.

He pointed out that these characteristics were particularly important in the higher education area where a lecturer, whether it was in the tutorial situation or the lecture theatre, did not want the embarrassment of equipment breaking down.

To uphold these standards, look for improvements and keep one step ahead of a fast-changing market, Sony's parent company in Japan employs a vast research team. Sony also manufactures the great majority of the components for its hardware which gives an added guarantee of quality.

In addition, Sony equipment is first sold in the United States before being put on the European market in Britain and elsewhere for most of the bugs to be ironed out.

Selling methods are also important to the company who emphasises cheap tough-to-be-attractive to the mass public and one which will produce as good a picture as television. Already a Sony home video recorder at twice the price of a standard television set has been introduced in America.

The Japanese use a film tape and runtimes costs are around £600 per hour. At previous prices, however, this system is likely to be introduced in Britain by 1978.

and salesmen must be prepared to attend courses. Furthermore, the service workshop must have a minimum amount of test equipment worth around at least £4,000.

Recently Sony introduced the VO 285 OP electronic editing, colour U-matic video-cassette recorder, which has raised great interest in the higher education sector.

The VO 285 OP permits relatively complex editing procedures and enables one to build up a complete programme to professional standard. The machine includes an instant mode which allows any combination of video, audio channel one and two to be recorded. In addition, when used with the RM 400 CE, an optional accessory, two machines may be remotely controlled in an editing set-up.

Sony's efforts are now being directed to the home user. It aims to produce a video cassette recorder cheap enough to be attractive to the mass public and one which will produce as good a picture as television. Already a Sony home video recorder at twice the price of a standard television set has been introduced in America.

The Japanese use a film tape and runtimes costs are around £600 per hour. At previous prices, however, this system is likely to be introduced in Britain by 1978.

TELEVISION

Odd problems
at OU's
Ally Pally

Alan Cane

Producing television programmes for the Open University carries its share of unusual problems. Peter Clark, filming geology sequences for a third-level earth science course last summer, had to find a pilot prepared to fly a lightweight aeroplane into the heart of the jagged Caillins Hills in Skye.

The problem was solved more easily than expected. The pilot taking the Open University team to Skye turned out to be an Open University third-level earth sciences student who contributed enthusiastically to the creation of the material for his own course by rigging his aeroplane between the rock masses to get the necessary camera shots. The result, a spectacularly colourful examination of the origin of the controversial tertiary granites on Skye will be shown this Sunday (February 29).

Not all Open University programmes involve such hazardous assignments, but they all involve hard work. Peter Clark, one of the 50 or so producers who make all the Open University's radio and television programmes from the Alexandra Palace studios, says he has to emphasize to newly recruited lecturers the amount of time needed to make a comparatively short programme: "I explain that, over the

six weeks the programme is in preparation, they will devote 10 full days of solid work to a programme that will last only 25 minutes."

The Alexandra Palace operation is the part of the Open University most familiar to people who still have a vision of the "University of the Air". It is only a part of the total Open University learning package, but all the producers reject the notion that it is merely the glossy window dressing on the essentially correspondence course nature of the Open University.

Jean Nunn, a biology producer, points out that radio and television may take only 10 per cent of a student's total study time but proportionally the value to the course is much greater. It is, she says: "A small, expensive but precious part of the syllabus."

Peter Clark and Jean Nunn were among a group of science producers including Tony Jolly (physics), David Jackson (chemistry) and Andrew Millington (physics) who suggested ways that radio and television could help to combat "the loneliness of the long-distance student".

They argued that:
● It provides experiences denied students working from written texts, such as the opportunity to see geological strata in the hills of Skye or one of Britain's foremost geneticists experimenting with wheat.

● It gives students the chance to see the academics who prepared their courses, to understand something of the way they think and their enthusiasm for their subjects.

● It will give students rare opportunities to hear academics and scientists who have made original discoveries or performed remarkable feats talking about their work. Examples include Sir Derek Barton the Nobel-prizewinning chemist and Dr Harrison Schmidt, the geologist astronomer who was the last scientist to leave the moon at the end of the United States Apollo programme.

The Alexandra Palace team argue that open university students are, in the nature of things, deprived of some aspects of university life and that these academic experiences by proxy are some compensation for this. In fact, in some ways the

programmes are more than compensation for they provide experiences denied orthodox university students. One measure of this is the way orthodox universities are buying open university programmes to use in their own courses. But the open university team warn against the casual use of their programmes. They are most effective when used with the proper course units and programme notes.

There is some discussion over approaches to programme construction, some producers believing that it is important to use prestigious outside lecturers to present programmes. The open university team has little difficulty attracting such people.

Other producers, among them Peter Clark, while acknowledging the value of the occasional prestigious presenter say it is important to do the best possible with the ordinary members of the course team.

Orthodox students, they argue, are exposed to good, bad and indifferent lecturers and Open University students benefit from seeing their own course team lecturers—people they identify with—in action.

The Alexandra Palace setup is spare but sufficient. There is one television studio and another—the first television studio in the world, established in 1936—is used for rehearsals. There are design and drawing offices for visuals and small laboratories to create the ingenious working models used to demonstrate scientific principles. There is also a system of radio studios.

The overall running costs are about £3.5 million a year, not a lot for an organization turning out 300 television and 300 radio programmes a year.

The programmes themselves are the joint responsibility of the production teams and the academic teams from Walton Hall, home of the Open University at Bletchley, but the division of responsibility is hard to define. There seems to be a consensus that it should stay that way. Nobody will say, for example, who puts the ideas for a programme into the hands of the production team, but all agree that each course team is a law unto itself.



An OU programme being made at Alexandra Palace.

New ideas are being wheeled out for 1976. On radio there will be a new kind of programme produced by David Jackson in which the history of important scientific debates will be presented through dramatic reconstructions of the actual events.

The joint universities course team on genetics has now finished its work and among the programmes shown will be a demonstration of the genetic manipulation of wheat presented by Dr Colin Leach of the Plant Breeding Institute at Cambridge.

And in a programme designed as part of a post experience course for

school teachers, John Whitley will show how one teacher approached the problem of getting concepts of energy over to third and fourth formers. The pupils built an electricity-generating wind rotor, a flat-plate solar heater and a methane gas producer.

The OU at Alexandra Palace is a highly professional outfit with standards similar to their commercial counterparts. One measure of their success is the fact that viewing figures suggest some of their programmes are watched by more than 500,000 viewers.

Alan Cane is deputy editor, THE.

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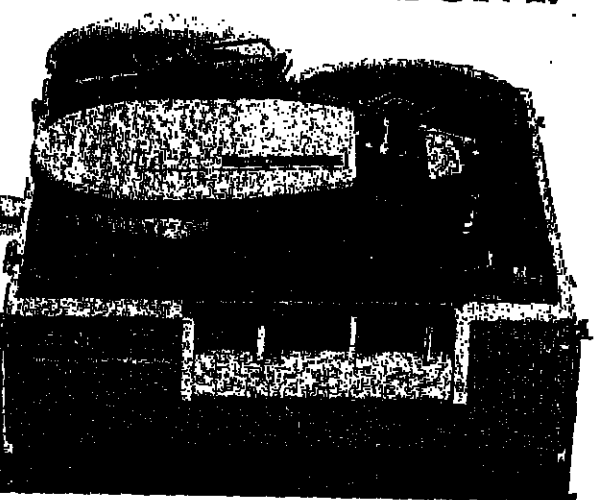
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they want

Roderick Maclean

There is a general and probably well-founded impression that the use of television is more active and widespread in our medical faculties than in any other. So much so, that one suspects that the medical use of television is the best.

Medical teachers are distinctive among one's academic colleagues in usually knowing precisely what they want. The current difficulty is this: the target solution is that there film or television resources that might meet the situation, or should they be trying something else? And many of the practical problems that do arise in medical teaching are those to which the machinery of television offers a reasonably satisfactory solution.

Take, for example, the basic problem of sheer visibility. Forget all the talk about communication and media and messages, and consider how you would cope if you wanted to demonstrate to a three-figure audience some minute detail in the teaching of anatomy, the microscopic manipulation of the cornea during surgery, or the appearance and behaviour of a disordered (fetus).

Such problems are not new, and there has been no failure to tackle them vigorously in the past. The difference is that today, the television camera, related as necessary to microscopes and other visual aids, is being used to distribute such detail around the operating theatre and laboratory, to the lecture room. No high-faloot theory about new systems and approaches, just straightforward visibility to every member of the relevant audience.

Interesting patients do not always present themselves during the most appropriate teaching weeks. Therefore, medical teachers increasingly introduce television's capacity to "deep freeze" a case, medical to catch and preserve on video tape the unusual or classic example of a condition, so that it can be reproduced at the appropriate point

in a teaching course, repeated and analysed as often as necessary.

The ability to store videotapes also means that a single recording may serve a variety of audiences—undergraduate teaching and nurses' training, student and general practitioner. There are areas, too, in which recordings originally made within the medical faculty may prove useful as teaching material in social science departments.

Of course there are "programme" possibilities in medical television. Doctors do come to the studio and prepare well-rehearsed teaching presentations that are a polished alternative to the conventional lecture; but time and again you come back to recognising the administrative, the mechanical, the brass-tacks uses of the camera and videotape as their overwhelming justification.

The undisguised but unobtrusive camera that records patterns of behaviour for the child psychiatrist and his students; the videotape machine that edits hours of surgery down to the significant essentials; the relay or recording that reduces the burden of repetitive bedside teaching.

Most mechanical of all perhaps, but often extremely effective, is television's ability—by split screen or superimposition—to bring together into one focus of attention elements which would normally be separate, scattered, distracting. For example, in a subject like cardiology, in which a television presentation can vividly bring together the patient's appearance, the signs and symptoms, the ECG trace, and the amplified heart sounds as heard through the stethoscope.

Personal contact between teacher and student, personal experience by students of real live patients—both are eminently desirable, and indispensable. However, there are many routines and techniques which, once committed to videotape, can with advantage be demonstrated and observed again and again without further patient involvement. How to place a broken arm, how to set about examining the ear—these, like the subtler arts of interviewing an out-patient, are appropriate material nowadays for the video-cassette and repeated individual study.

Because of his predominantly practical approach to the use of television, the medical teacher tends to be a healthy influence on the full-time medical man. Medical teachers are the least likely among academics to accept a formula or a

style of presentation merely because it has developed as a television convention. Much of the "deep freezing" of actually suits their purposes is in effect a kind of television notetaking rather than a polished essay.

Medical teachers are also practical in their attitude to the use of colour television. There are certain areas within which instructional television must offer colour, if it is to be intelligible at all. In these, all one can do is to assess the urgency of the teaching need in relation to the local economic circumstances. There are after all, sources of colour other than television.

What is sometimes surprising to the outsider is that medical teachers so often settle without undue complaint for monochrome. But you are severely practical about it, you are aware that television is a teaching (though it is an excellent alternative to the lack of experience) is hardly as good as the real thing; that a medical would seriously consider basing his instruction on anything other than the student's real contact with patients in full (or preferably living) colour.

Putting the question of colour aside, however, the message remains—that medical television, though widely and variously useful, is essentially supplementary.

Roderick Maclean is director of audio-visual services in the universities of Glasgow and Strathclyde.

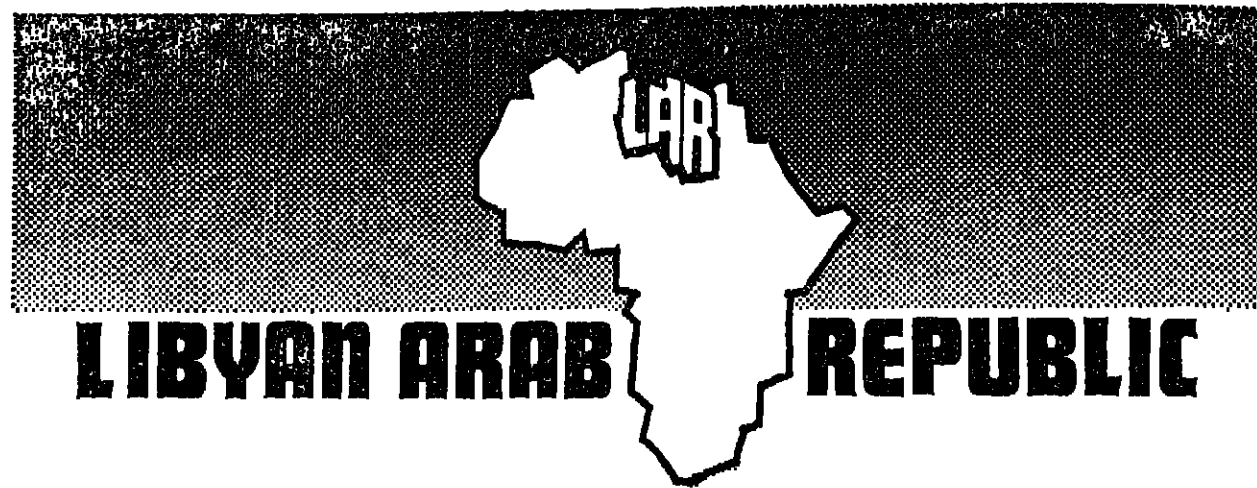
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73-79 Fulham Road, Swiss Cottage, London NW6 4BB. Telephone: 01-235 1111

Further information about the interview, the method of application change, be obtained from the Association of American Universities, 1115 15th Street, N.W., Washington, D.C. 20004. It will only be from the financial institutions, the National Student Health Insurance Fund, South Australia, Australia, and the American Association of Colleges in March, 1978.



UNIVERSITY OF TRIPOLI, ACADEMIC
STAFF AFFAIRS, GENERAL ADMINIS-
TRATION, P.O. BOX 398, TRIPOLI,
LIBYAN ARAB REPUBLIC

The University of Tripoli requires Teaching Staff members in
the following fields for academic year 1976/77.

FACULTY OF MEDICINE

1. Radiodiagnosis
2. Radiodiagnosis
3. Radiotherapy
1. Clinical Pathology
2. Orthopaedics
3. Vascular Surgery
1. General Medicine
2. Neurology
3. Cardiology
4. Chest
5. Hematology
6. Endocrinology
1. Anaesthesia
2. Pharmacology
1. Clinical Pharmacology
2. Human Physiology
1. Human Histology
2. Human Embryology
1. General Anatomy
1. Histopathology and Morbid Anatomy
2. Med. Microbiology
2. Med. Parasitology
3. Med. Virology + Immunology
4. Med. Mycology
5. Med. Bacteriology
6. Med. Immunology
1. Protein Biochemistry
2. Bioenergetics
3. Clinical Biochem.
4. Nutritional Biochemistry
5. Nucleic Biochem.
6. Carbohydrate Biochem.

PAY SCALE (MEDICAL)

Grade	Starting Rate	Maximum Rate	Annual Increment	Number of Increments
Professor	6240	7104	144	8
Associate Prof.	5760	6624	144	8
Asst. Prof.	5280	6000	120	8
Lecturer	4800	5520	120	8
Asst. Lecturer	4320	4800	120	8

1 L. One = £1.60

Clinical allowances particularly for all the teaching staff members working in faculty of medicine, University of Tripoli, and those are additional 1.

POSITION ANNUAL ALLOWANCES

Professor	1600 L.D.
Associate Prof.	1440
Asst. Prof.	1280
Lecturer	960
Asst. Lecturer	800

APPLICATIONS

Applicants are invited to apply in writing, enclosing a full curriculum vitae, photo-copies of qualifications, and the names of two referees, not later than 18th April, 1976, to:
The Cultural Office, Embassy of the Libyan Arab Republic, 58 Princes Gate, London SW7

FACULTY OF PHARMACY

1. Pharmaceutics
2. Pharmacognosy
3. Pharmacology
4. Industrial pharmacy
5. Medicinal and Pharmaceutical chemistry

PAY SCALE (PHARMACY)

Grade	Starting Rate	Maximum Rate	Amount of Increment	Number of Increments
Professor	5200	5920	120	6
Assoc. Prof.	4800	5520	120	6
Asst. Prof.	4400	5000	100	6
Lecturer	4000	4600	100	6
Asst. Lect.	3400	4000	100	6

General Outline of the Contract for Teaching Staff at the University of Tripoli, L.A.R.

1. The academic year usually commences on the 1st of September and extends to the end of August including a holiday of 45 days.
2. The University supplies tourist class air tickets to a staff member, his wife and up to 4 of his children under 18 years of age. These tickets cover the journey between the place of recruitment and Tripoli, Libyan Arab Republic.
3. The University pays a monthly housing allowance as follows:
(a) staff member accompanied by his family LD100
(b) single or unaccompanied staff member LD 70
- 4.A The University pays, at the beginning of the contract, a furniture allowance equivalent to two months salary. Single staff members or those not accompanied by their families receive half this allowance.
- B If the staff member terminates the contract, or is in breach of the contract, he must return to the University a percentage of the furniture allowance proportional to the period not served under the contract.
5. Leave air tickets are provided to the staff member and his family as mentioned under (2) above, after two years of continuous work with the University.
6. For the first four years of service, a gratuity of one month's salary is paid to staff member; a gratuity of two month's salary is paid for each subsequent year of service.
7. The University provides full medical services for staff members and their families at the Government Hospitals in the Libyan Arab Republic.

Polytechnics continued

LIVERPOOL
THE POLYTECHNIC
DEPARTMENT OF
MARINE AND PRODUCTION
LECTURER/PRINCIPAL
LECTURER/PRINCIPAL
SALVAGEING
(vacant from 1st September 1976)

Applications are invited from experienced and fully qualified marine engineers who are conversant with the construction and maintenance of marine engines for the Department of Marine and Production Lecturing and Salvaging.

It is planned to introduce a new degree in marine engineering as part of a course in the Department of Marine and Production Lecturing and Salvaging. The person appointed will be expected to play an active role in the development of marine engineering courses.

In the case of an application from a candidate with exceptional experience and qualifications, the person appointed may be offered at Principal Lecturer level with responsibility for leadership in the Department of Marine and Production Lecturing and Salvaging.

Salary Scale: Senior Lecturer £5,011 to £6,417; Senior Lecturer £4,540 to £5,946; Lecturer £3,540 to £4,946; Lecturer £3,069 to £4,475.

DEPARTMENT OF MANAGEMENT STUDIES
SENIOR LECTURER IN MARKETING

Applications are invited for the post of Senior Lecturer in Marketing from candidates with qualifications in Management Studies and with considerable experience in the marketing function.

The successful candidate will be expected to make a major contribution to the Department of Management Studies and to the University of Liverpool.

Salary Scale: Senior Lecturer £5,011 to £6,417; Senior Lecturer £4,540 to £5,946; Lecturer £3,540 to £4,946; Lecturer £3,069 to £4,475.

DEPARTMENT OF CIVIL ENGINEERING
SENIOR LECTURER IN CIVIL ENGINEERING

A qualified Engineer or Architect with experience in the design and construction of civil engineering structures is required for the post of Senior Lecturer in Civil Engineering.

The successful candidate will be expected to make a major contribution to the Department of Civil Engineering and to the University of Liverpool.

Salary Scale: Senior Lecturer £5,011 to £6,417; Senior Lecturer £4,540 to £5,946; Lecturer £3,540 to £4,946; Lecturer £3,069 to £4,475.

DEPARTMENT OF TOWN AND COUNTRY PLANNING
SENIOR LECTURER IN TOWN AND COUNTRY PLANNING

Planner with academic excellence and experience in the design and construction of town and country planning is required for the post of Senior Lecturer in Town and Country Planning.

The successful candidate will be expected to make a major contribution to the Department of Town and Country Planning and to the University of Liverpool.

Salary Scale: Senior Lecturer £5,011 to £6,417; Senior Lecturer £4,540 to £5,946; Lecturer £3,540 to £4,946; Lecturer £3,069 to £4,475.

DEPARTMENT OF SOCIAL SCIENCES
LECTURER IN SOCIAL SCIENCES

Required for 1st September, 1976, is a person with a degree in Social Sciences and with experience in the design and construction of social sciences.

The successful candidate will be expected to make a major contribution to the Department of Social Sciences and to the University of Liverpool.

Salary Scale: Senior Lecturer £5,011 to £6,417; Senior Lecturer £4,540 to £5,946; Lecturer £3,540 to £4,946; Lecturer £3,069 to £4,475.

DEPARTMENT OF MARITIME STUDIES
LECTURER IN MARITIME STUDIES

Required for 1st September, 1976, is a person with a degree in Maritime Studies and with experience in the design and construction of maritime studies.

The successful candidate will be expected to make a major contribution to the Department of Maritime Studies and to the University of Liverpool.

Salary Scale: Senior Lecturer £5,011 to £6,417; Senior Lecturer £4,540 to £5,946; Lecturer £3,540 to £4,946; Lecturer £3,069 to £4,475.

Newcastle College of Advanced Education

(Principal: E. Richardson, B.Sc., Ph.D.)

SENIOR ACADEMIC POSITIONS

Newcastle College of Advanced Education, a corporate college of the Colleges of Advanced Education Act of N.S.W., is being developed as a multi-occupational tertiary institution to cater for the demands of higher education in the Newcastle and surrounding region. The College offers a wide range of courses in the fields of Teacher Education and Education, and has a present enrolment of some 2,200 students, including some 300 in external studies courses.

The College occupies extensive modern, well appointed buildings situated in an attractive natural bushland setting of some 40 acres in the suburb of Waratah West, adjacent to the University of Newcastle. Education Clinic and Teaching Centre, designed to aid the development of education, especially in the field of special resources teachers and teachers of educationally handicapped children, is nearing completion.

The College invites applications from suitably qualified persons for the following positions:-

ASSISTANT PRINCIPAL

The person appointed will be a distinguished scholar, capable at some future date, of assuming the leadership of the College in the field of education. He will be required to have had:-

1. Substantial administrative experience and the ability to co-ordinate the educational programme of a large educational institution.
2. Substantial teaching experience, both at school level and as a College of Advanced Education or a Department of Education.
3. A capable organizer able to give direction to a team of staff in the field of education.
4. A capable teacher able to develop and deliver a teaching programme at various academic levels in the field of Special Education.

The appointee will administer the special education programme of the College and will engage in such other duties as are delegated to him by the Principal.

DIRECTOR OF SPECIAL EDUCATION CLINIC AND TEACHING CENTRE

The successful applicant will possess the following qualities. He or she will be:-

1. Sensitive to the needs of children who have special learning difficulties.
2. A recognized authority in the field of Special Education, with substantial research and clinical experience.
3. A capable organizer able to give direction to a team of staff in the field of Special Education.
4. A capable teacher able to develop and deliver a teaching programme at various academic levels in the field of Special Education.

The appointee will administer the special education programme of the College and will engage in such other duties as are delegated to him by the Principal.

Terms of Appointment

Salaries: Assistant Principal \$22,033 per annum
Director of Clinic \$22,033-22,247 per annum
(Salaries include basic national wage adjustment.)

Appointments initially will be made under the N.S.W. Public Service Act on the understanding that the appointee will transfer to the N.S.W. State Superannuation Fund. The College will provide assistance for travel, removal and initial accommodation expenses and further assistance relating to the post and conditions of appointment may be obtained from the Secretary of the College.

Applications, including details of qualifications, experience, and the names and addresses of three referees willing to support the application, should be sent to the Principal, Newcastle College of Advanced Education, Box 84, P.O., WARATAH, N.S.W., 2288, AUSTRALIA.

SUNDERLAND

SUNDERLAND POLYTECHNIC
FACULTY OF HUMANITIES
DEPARTMENT OF SOCIAL SCIENCES
LECTURER IN ECONOMICS

Required for 1st September, 1976, is a person with a degree in Economics and with experience in the design and construction of economics.

The successful candidate will be expected to make a major contribution to the Department of Social Sciences and to the University of Sunderland.

Salary Scale: Senior Lecturer £5,011 to £6,417; Senior Lecturer £4,540 to £5,946; Lecturer £3,540 to £4,946; Lecturer £3,069 to £4,475.

BRISTOL
BRISTOL POLYTECHNIC
RESEARCH ASSISTANT IN HISTORY

Required for 1st September, 1976, is a person with a degree in History and with experience in the design and construction of history.

The successful candidate will be expected to make a major contribution to the Department of History and to the University of Bristol.

Salary Scale: Senior Lecturer £5,011 to £6,417; Senior Lecturer £4,540 to £5,946; Lecturer £3,540 to £4,946; Lecturer £3,069 to £4,475.

PRESTON
THE POLYTECHNIC
Applications are invited for the post of Lecturer in the field of Education.

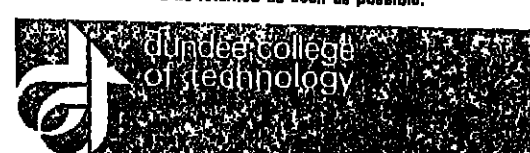
The successful candidate will be expected to make a major contribution to the Department of Education and to the University of Preston.

Salary Scale: Senior Lecturer £5,011 to £6,417; Senior Lecturer £4,540 to £5,946; Lecturer £3,540 to £4,946; Lecturer £3,069 to £4,475.

Department of Electrical and Electronic Engineering RESEARCH STUDENTSHIP

Applications are invited for a research studentship concerned with the development of electronics circuitry and digital processes in an investigation into the use of ultrafast in medicine. Applicants should either be graduates with a good honours degree in electronics or students who expect to graduate with a degree in electronics. The person appointed will be required to register for a higher degree. Conditions of award and terms are similar to those of the Research Council.

Further details and application form may be obtained from the Assistant Secretary (Administration), Dundee College of Technology, Bell Street, Dundee DD1 1HQ, to whom completed application forms should be returned as soon as possible.



Colleges of Education

BRADFORD COLLEGE

Applications are invited for the post of

Head of the Margaret McMillan School of Education (Head of Department Grade VI)

The work of the School embraces the initial and in-service education of teachers and nursery nurses together with courses for industrial training instructors. Applicants should have substantial experience of teacher education. Experience of work with the Council for National Academic Awards and work in the field of further education would be an advantage.

The salary will be in accordance with the Burnham scale for Heads of Department Grade VI £8037-£8913

Further particulars and forms of application may be obtained from:
Staffing Officer, Bradford College,
Great Horton Road, Bradford BD7 1AY,
and must be returned within 14 days of the appearance of this advertisement.

London College of Fashion

Oxford Circus, W.1

Department of Clothing Technology requires

Principal Lecturer in Clothing Technology

Candidates should have qualifications/experience appropriate to teach up to degree level. Salary Scale £5,940-£7,578 plus London Allowance £351.

ilea

Further details and forms of application returnable within 14 days from Senior Administrative Officer at 100 Curtain Road, EC2A 3AE.

Colleges of Education continued

CHRIST CHURCH COLLEGE CANTERBURY

Applications are invited for the post of

HEAD OF EDUCATIONAL STUDIES

to take effect from 1 September, 1976, on the retirement of Dr. J. H. Higginson. The salary will be on a Group V Head of Department (£7,395-£8,271). The College is to remain as a free standing College of Education offering courses for the B.Ed. degree, the Postgraduate Certificate in Education, and for higher degrees and diplomas. There are considerable opportunities for innovation and candidates should have experience of promoting educational research. Further details are available from the Principal to whom applications are to be sent not later than 17 March.

Colleges and Departments of Art

MERTON

Applications are invited for the post of Principal Lecturer in the field of Art. The successful candidate will be expected to make a major contribution to the Department of Art and to the University of Merton.

Salary Scale: Senior Lecturer £5,011 to £6,417; Senior Lecturer £4,540 to £5,946; Lecturer £3,540 to £4,946; Lecturer £3,069 to £4,475.

WINCHESTER
WINCHESTER COLLEGE
Applications are invited for the post of Lecturer in the field of Education.

The successful candidate will be expected to make a major contribution to the Department of Education and to the University of Winchester.

Salary Scale: Senior Lecturer £5,011 to £6,417; Senior Lecturer £4,540 to £5,946; Lecturer £3,540 to £4,946; Lecturer £3,069 to £4,475.

Administration

DORSET

Applications are invited for the post of Lecturer in the field of Education. The successful candidate will be expected to make a major contribution to the Department of Education and to the University of Dorset.

Salary Scale: Senior Lecturer £5,011 to £6,417; Senior Lecturer £4,540 to £5,946; Lecturer £3,540 to £4,946; Lecturer £3,069 to £4,475.

WINCHESTER
WINCHESTER COLLEGE
Applications are invited for the post of Lecturer in the field of Education.

The successful candidate will be expected to make a major contribution to the Department of Education and to the University of Winchester.

Salary Scale: Senior Lecturer £5,011 to £6,417; Senior Lecturer £4,540 to £5,946; Lecturer £3,540 to £4,946; Lecturer £3,069 to £4,475.

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Applications are invited for the post of Lecturer in the field of Education.

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